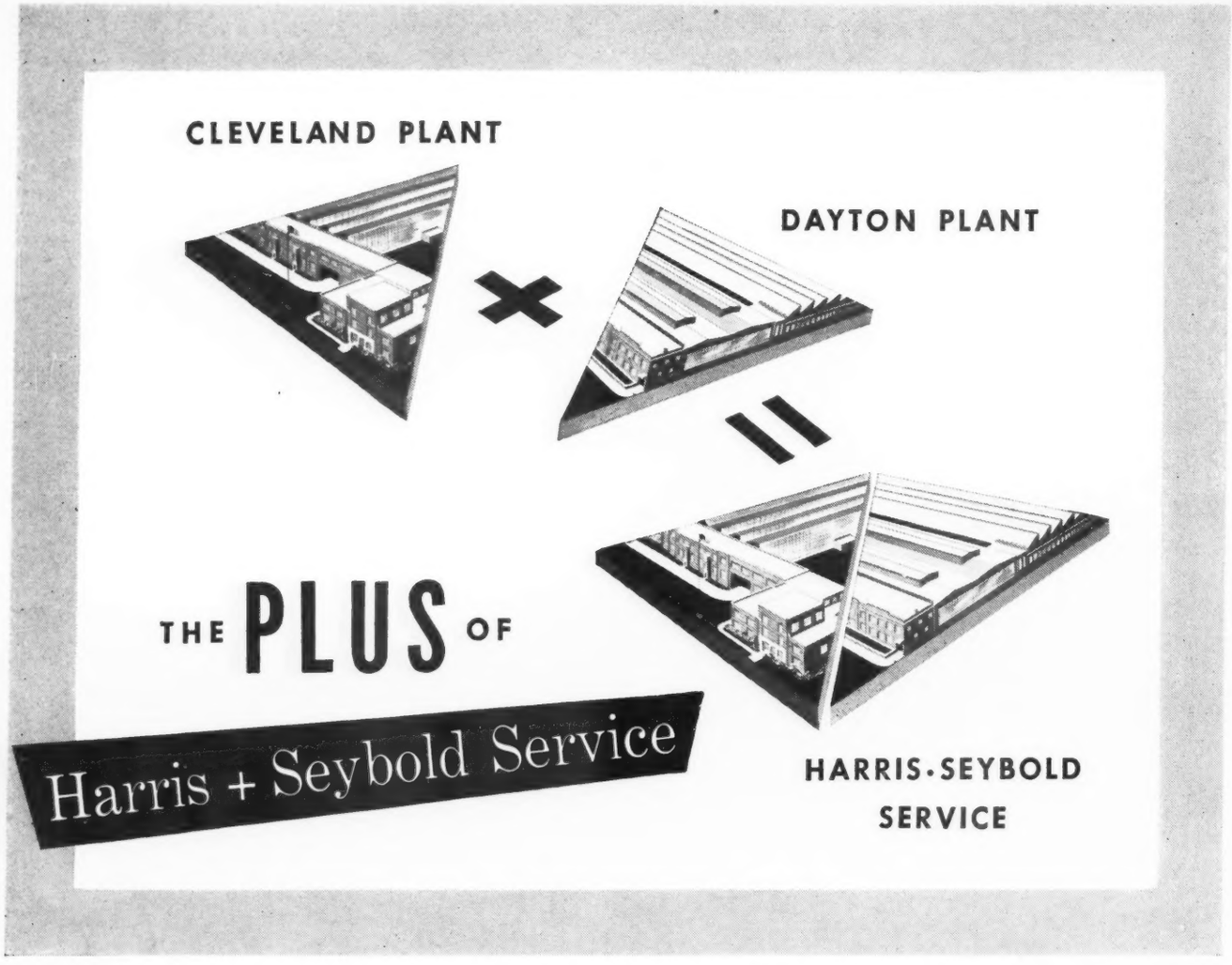
PRINTING EQUIPMENT Engineer

JANUARY 1946



Solutions to problems in the graphic arts are, directly or indirectly, all aimed at the same spot—satisfying the customer with the finished piece, *printed and trimmed.*

When it comes to printing by offset, gravure or letterpress, Harris presses have, for half a century, offered many of the best answers. And for 60 years similar leadership has been earned by Seybold machines, for precision cutting and trimming.

The new integrated service now offered by Harris-Seybold, both on printing and cutting problems, through new direct factory offices, therefore, represents a PLUS service which neither Harris nor Seybold ever could have offered alone. The Harris-Seybold-Potter Company, General Sales Offices, Cleveland 5, Ohio.

HARRIS · SEYBOLD

HARRIS PRESSES · SEYBOLD CUTTERS · OTHER GRAPHIC ARTS PRODUCTS

A REPORT OF PROGRESS FROM

Mueller Art

STA-HI

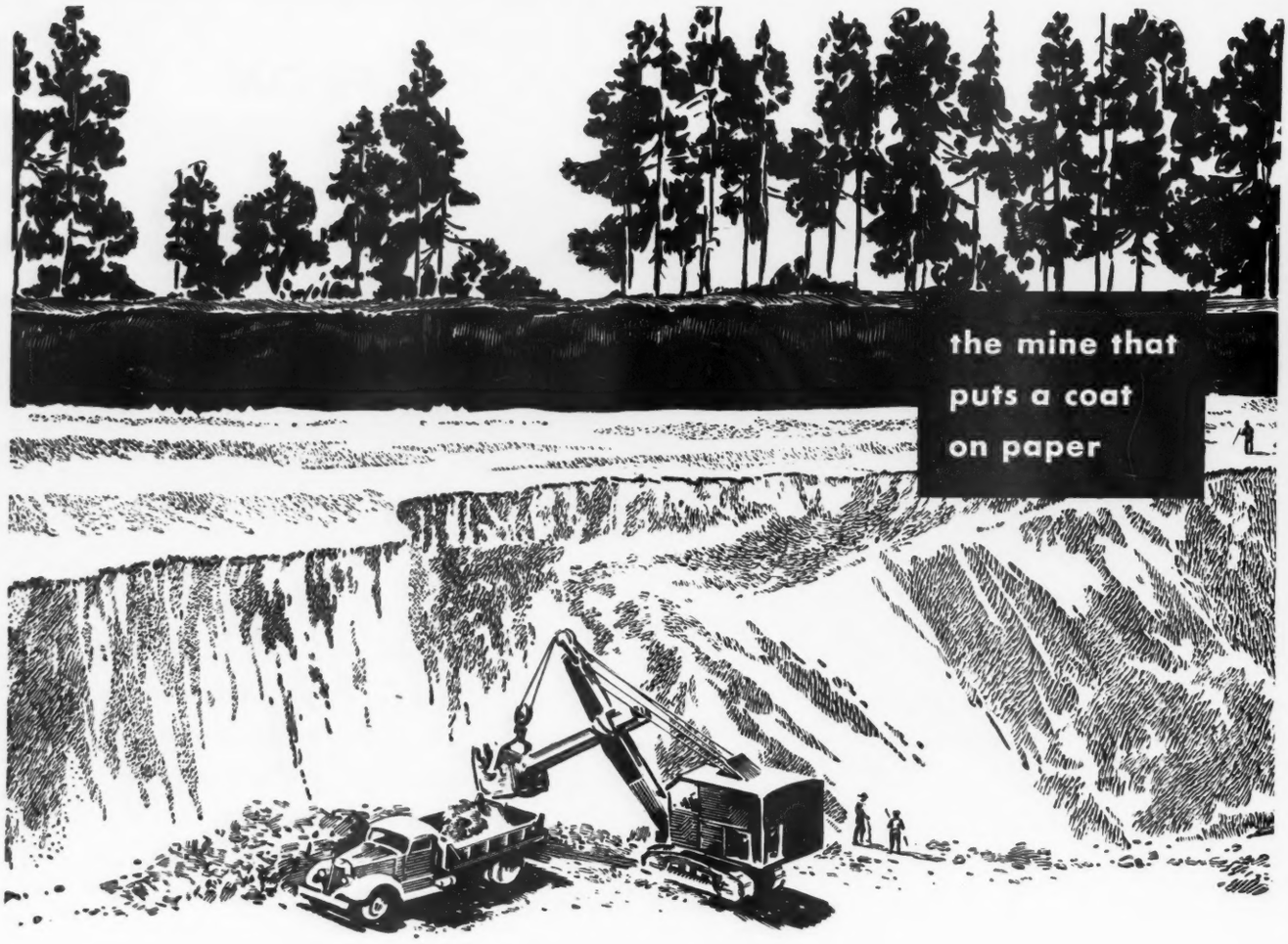
First of all, we want to thank our many good customers who have shown such splendid patience and cooperation in waiting for us to fill their orders for Sta-Hi machinery during the last few months . . . Reconversion from our wartime activities has involved many problems, and during this transition period we have been unable to make deliveries on a normal basis . . . The understanding of this condition by friends of Sta-Hi has been most helpful and we want to extend to them our sincere appreciation . . .

We have now increased our production to a level where we can more than satisfactorily meet our commitments on such orders and we are hopeful that circumstances will continue so that we can further increase our services . . . To this end we are now building an addition to our factory which will give us badly needed space and manufacturing facilities . . . We expect this project to be completed and ready for operation in the near future . . . At such time we shall be in an even better position to give speedier delivery on Sta-Hi Master Formers, Sta-Hi Routomatic Curved Plate Routers, Sta-Hi Finaltrim Curved Matrix Shears, Sta-Hi Vacuum Flat Casting Boxes and Sta-Hi Power Lift Form Files . . . Production of Premier Rotary Shavers is likewise being rapidly stepped up . . .

Our expansion is a direct result of the continued patronage of progressive newspaper and other graphic arts plants across the country . . . To them all we owe a debt of gratitude which we shall try to meet to the very best of our ability in the coming months of 1946 . . .

STA-HI CORPORATION

1020 Crocker Street **Los Angeles 21, California**



In BLACK and WHITE, HUBER RESOURCE-fulness STANDS OUT!

BURIED in the hills of Georgia and South Carolina, there's a glistening white mineral that makes your favorite magazine more attractive, more readable, more durable. It's famous HYDRATEX clay, as pure and beautiful to look at as Carrara marble. It's mined by Huber, processed by Huber for use as a coating on the finest commercial paper stock.

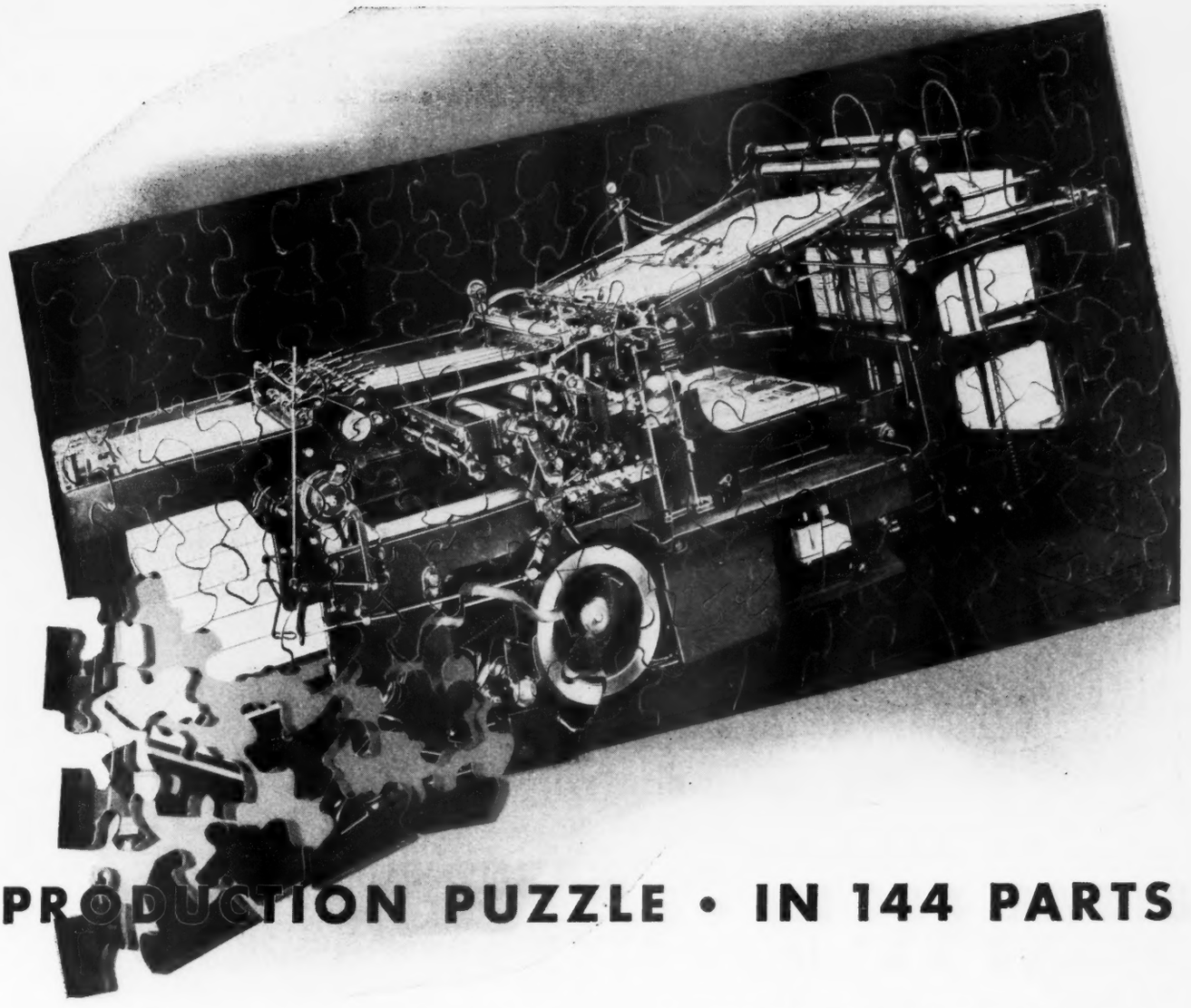
Yes, *from the ground up,* Huber knows every side of printing, paper as well as ink. And because Huber, unique among ink producers controls most of its own sources of supply—controls every step of production—great newspapers and publications rely on Huber for quality and uniformity.

Since 1780, we have devoted our skill and our resources to producing the finest news and publication inks obtainable. Today, after meeting heavy demands for critical war materials such as famous WYEX Carbon Black, used extensively in the Government rubber program, Huber's expanded facilities are capable of handling the biggest jobs in newspaper and publication printing inks.

J. M. HUBER, INC. *New York; Chicago; St. Louis; Boston; Huber, Ga.; Graniteville and Langley, S. C.; Borger, Texas.*

HUBER

PRINTING INKS, PETROLEUM, NATURAL GAS AND GASOLINE, CARBON BLACKS, CHINA CLAYS, RUBBER CHEMICALS.



PRODUCTION PUZZLE • IN 144 PARTS

144 different materials make the Miller Major. Each material is extensively tested and chosen for physical, chemical and economic qualities. Substitutions are impracticable; for example, there are 33 different steels used in the Miller Major alone and few of them can be replaced by another with equal efficiency.

Disperse these 144 materials over 48 states. Vary their selling prices with the weather. Observe that millions of men who once made these materials are still in uniform. Start a thousand of America's large machinery builders searching for these and similar materials at once — and you have chaotic confusion.

Every machinery manufacturer including Miller, has a jigsaw puzzle on hand, so to speak. Every missing material is a perplexing part of the puzzle. And the puzzle is woefully incomplete even if only one or two parts are missing. Take castings alone; steel, bronze, zinc, aluminum and malleable and gray iron castings of various characteristics and a variety of shapes are needed for the Miller Major — all from an American foundry industry with 80% of its productive capacity desperately undermanned.

But, America's pressrooms need presses — modern Miller Presses of durable quality at least equal to those of prewar. That problem is ours, sincerely and deeply understood. We intend to produce Miller Automatics and offer them soon, possibly within a month or so.

miller

MILLER PRINTING MACHINERY CO. • PITTSBURGH, PA.

SAM'L BINGHAM'S SON MFG. CO.

MANUFACTURERS OF

PRINTERS' ROLLERS

LITHO-OFFSET ROLLERS

RUBBER
NON-MELTABLE
FABRIC-COVERED
ROTOGRAVURE

ROLLERS

OFFSET
COMPOSITION
VARNISH & LACQUER
GRAINING

PRINTERS ROLLERS

COMPOSITION; SYNTHETIC RUBBER;
NATURAL RUBBER; VULCANIZED OIL

FOR EVERY PRINTING PURPOSE

WE ARE NOW MAKING COMPOSITION ROLLERS

FOR WINTER USE

SHIP YOUR OLD ROLLERS

TO FACTORY MOST CONVENIENT TO YOU

FACTORIES

ATLANTA 3	DES MOINES 2	KALAMAZOO 12	OKLAHOMA CITY 6
CHICAGO 5	DETROIT 10	KANSAS CITY 6	PITTSBURGH 3
CLEVELAND 14	HOUSTON 6	MINNEAPOLIS 15	ST. LOUIS 2
DALLAS 1	INDIANAPOLIS 2	NASHVILLE 3	SPRINGFIELD, O.

Roller Makers since 1847

PRINTING EQUIPMENT *Engineer*

Volume 71 Number 4

A technical publication for the mechanical executive responsible for printing production, equipment and supplies in the commercial, magazine, private plant and daily newspaper field.

PRINTING EQUIPMENT Engineer, Published monthly at 1276 West Third St., Cleveland 13, Ohio, Copyright 1946 by Willsea Publishing Co.

EDITORIAL STAFF

MacD. SINCLAIR
Editor

ADAM HENRI REISER
Associate Editor

HERMAN SLATER
Associate Editor

BUSINESS STAFF

DON WILL, Publisher

Russ Birchfield, Eastern Representative
509 Fifth Ave., New York 16, N. Y.
Phone VAnderbilt 6-0890

E. P. Bloomster, Western Representative
232 East Erie St., Chicago 11, Ill.
Phone SUperior 2444

★

Subscription price per year, $3.50 in advance in U. S. A. Single copy current issues 35c; feature issues $1 per copy; December Equipment and Supplies Catalog Issue $1 per copy. Subscriptions in foreign countries as permitted for duration $4.50 (U.S. currency) in advance. Canadian printing plant mechanical and production executives receiving **Printing Equipment Engineer** under CCA regulations will be charged $1 postage per year in advance to cover additional postage to Canada.

Member Controlled CCA Circulation Audit

Printed in U.S.A.

LEADING ARTICLES

January 1946

Sound Conditioned Pressroom....11
By FRANCIS A. WESTBROOK

Outlook For the Year 1946.....12
By H. A. PORTER

Comments Upon 1946 Equipment and Industry Trends.....12
By WM. C. HUEBNER

Outlook for New Printing Equipment.....13
By E. G. WILLIAMS

Employment and Service.....13

Proof Press Manufacturer Opens Chicago Salesroom.....14

Efficient Display Copy and Composition Handling System at Dayton (O.) *Journal-Herald*....15

Making Plates for Colored Comics.16
By ADAM HENRI REISER

Molding Printing Types from Plastic Substances.....18
By STAFF WRITER

Executive Paragraphs.....20
Items of Interest about people you may know in the Graphic Arts. If you don't know them get acquainted by reading these items.

Monomelt Arranges to Use General Mills' Facilities.....22

Equipment and Supplies.....22
Monomelt Heavy Duty Plate Shaver
Multi-Plate Mounting and Multi-Color Proving Machine

Printed Radio Provided for at Station WGHF.....26

Patents for Graphic Arts Field....27

Annual Editorial Index.....42

TECHNICAL BOOKS

STANDARD BOOK ON ESTIMATING for PRINTERS—By Fred W. Hoch. Revised 1941 edition. This book is a primer for students and a reference for printers and estimators. Every printing plant should have a copy. Author explains all operations in commercial printing plant and shows production time allowance for each in hours and decimal hours. Size, 6 in. by 9¼ in., 268 pages, $3.75 per copy, cash with order.

PRINTING INKS—Their Chemistry and Technology—**By Carleton Ellis.** Bound in cloth, 6 in. by 9½ in., 560 pages, well illustrated. For printing executives, pressmen, photo-engravers, platemakers, ink manufacturers, chemists, paper-makers. Author stays close to printing plant. The solving of new production problems brought about by technological improvements, both in equipment and inks, created the urgent need for this book. Price $7, cash with order.

THE PRACTICE OF PRESSWORK—By Craig R. Spicher. We offer copies to our readers, at the special price of $4.00 per copy, cash with order. No printer should be without a copy (9000 copies printed).

LITHOGRAPHERS MANUAL — Compiled by Walter E. Soderstrom. Second revised edition. Technical information from copy to finished job. Nationally known technical men contributed the bulk of practical camera, platemaking and presswork information. Size 8½ in. by 11¼ in. Bound in red cloth, gold stamped. Many of the 368 pages are illustrated. Price $5 per copy, cash with order.

PHOTOGRAVURE—By H. Mills Cartwright. Covers all of photogravure's basic principles in concise and readable language. Rotogravure receives minor discussion but this is generally considered best textbook on photogravure process. Contains 202 pages, 34 illustrations, maroon cloth, size 6¼ in. by 9¼ in., $3.50 per copy, cash with order.

MANUAL OF STEREOTYPING—By Joseph Goggin. This 256-page book conveys technical information and manipulating procedure. Written by a practical stereotyper. Price $5.00, cash with order.

PRESSROOM PROBLEMS AND ANSWERS—By Fred W. Hoch. Might be consdered a miniature encyclopedia since it contains answers to 334 pressroom problems which have been answered by Mr. Hoch. Written in language of journeyman pressman. Pressmen, production men, paper and ink manufacturers, electrotypers and photo-engravers will find this book of high utility when pressroom problems arise in which tendency is to lay blame on furnished materials used in pressroom production. Size, 6 in. by 9½ in., 258 pages, gold stamped blue cloth. Price, $2 per copy, cash with order.

HOW TO ADJUST WORK-UPS—By Wm. H. Lichter and Geo. F. Smalley. Booklet consists of 24 pages in which are analyzed and remedies are given for prevention and/or elimination of work-ups. Material written as result of actual plant experience. Size, 5¼ in. by 7¼ in. Price, $1 per copy, cash with order.

HANDBOOK FOR PRESSMEN—By Fred W. Hoch. Book written by authority on all phases of flat-bed letterpress production for the practical pressman. Contains 248 pages, 26 illustrations and 24 charts, $3 per copy, cash with order.

READING AS A VISUAL TASK—By Matthew Luckiesh, D.Sc. and Frank Moss, E.E. Most important research work to have been published in many years. For printers, designers, publishers, typographers and layout men. Readability of type, type faces, length of line, leading between lines, paper, ink, printing method and lighting are some of the factors involved in ease of reading. Size 5½ in. by 8⅝ in., 428 pages, bound in maroon gold stamped cloth. Price $5 per copy. Please enclose remittance with order.

Please Note: All books orders must be accompanied by remittance.... This is necessary because of narrow handling margin allowed.

PRINTING EQUIPMENT *Engineer*

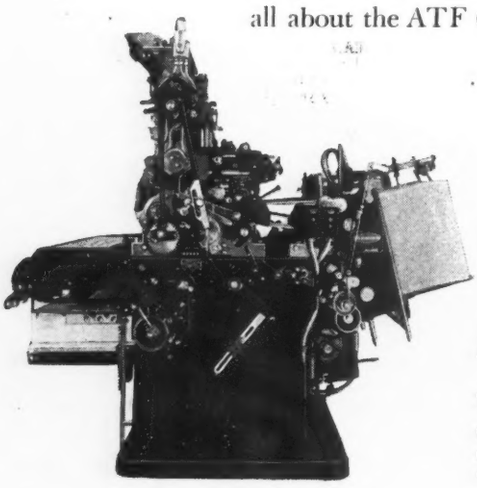
1276 W. 3 St., Cleveland 13, Ohio

"ATF CHIEFS PRODUCE HIGH-QUALITY WORK AT MINIMUM COST"

FOR 22 years, Henry J. Rothman, proprietor of the Canterbury Printing Co., New York, concentrated on fine letterpress printing. Then, five years ago, he saw the march of time give new direction to fine printing, and he put in an ATF Big Chief offset press. Now he says, "*It is a great salesman for the letterpress printer. Since we installed our Big Chief we have been able to satisfy all the printing needs of our customers.*"

Combining ATF Chiefs with ATF Kellys in your plant will give you the balanced shop so essential to the demands of today. The ATF Chiefs are as skilfully designed to produce high quality and economical offset lithography as the ATF Kellys have proved they can for letterpress.

Now that civilian needs can again be met, ATF has everything for an offset department from darkroom to pressroom. Right now, any ATF press can be reserved for future delivery. Ask the man who represents ATF for a copy of "Offset Answers" and to tell you all about the ATF Civilian Priority Delivery Plan, or write to us direct.

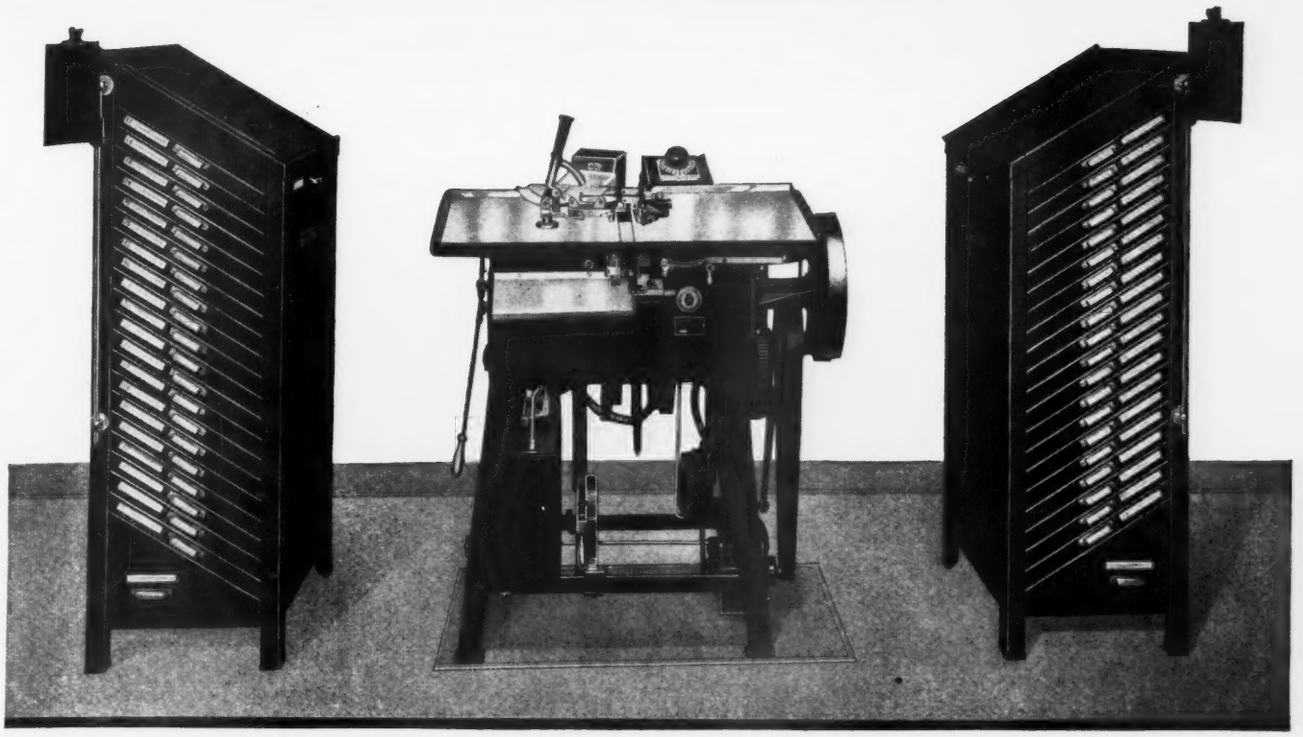


ATF CHIEFS
are made in three sizes:
14x20; 17x22; 22x29

American Type Founders

200 ELMORA AVENUE, ELIZABETH B, NEW JERSEY

We are cooperating with the Committee for Economic Development. There are C.E.D. local committees in 2800 counties and communities. Consult the nearest one now, for help in speeding reconversion and providing maximum employment.



Ludlow Helps Solve Your Production Problems

1. Lowers setting time—Ludlow matrices "gathered" rather than set singly. **2.** Eliminates looking for sorts—Ludlow matrices always ready in cases. **3.** Reduces justification time—Ludlow space matrices easy to insert and remove. **4.** Lessens make-up time—Ludlow sluglines are assembled quickly and easily. **5.** Requires less time and care tying up pages, handling forms and jobs, etc. **6.** Reduces lock-up time—Ludlow-set forms have larger and fewer units. **7.** Lessens proofreading time—Ludlow sluglines, once read and corrected, stay correct. **8.** Lowers press running time—Ludlow-set forms reduce danger of work-ups. *Ask us for further details about these and other Ludlow advantages.*

Elrod

equipment in your plant assures abundance of high-quality leads, slugs, rule and base material.

Ludlow Typograph Company **2032 Clybourn Avenue, Chicago 14**

Speedry

1 SEALED FOUNTAIN

●

2 ELIMINATES SOLVENT EVAPORATION

●

3 ASSURES CONTINUOUS COLOR UNIFORMITY

●

4 ELIMINATES WASH UP

●

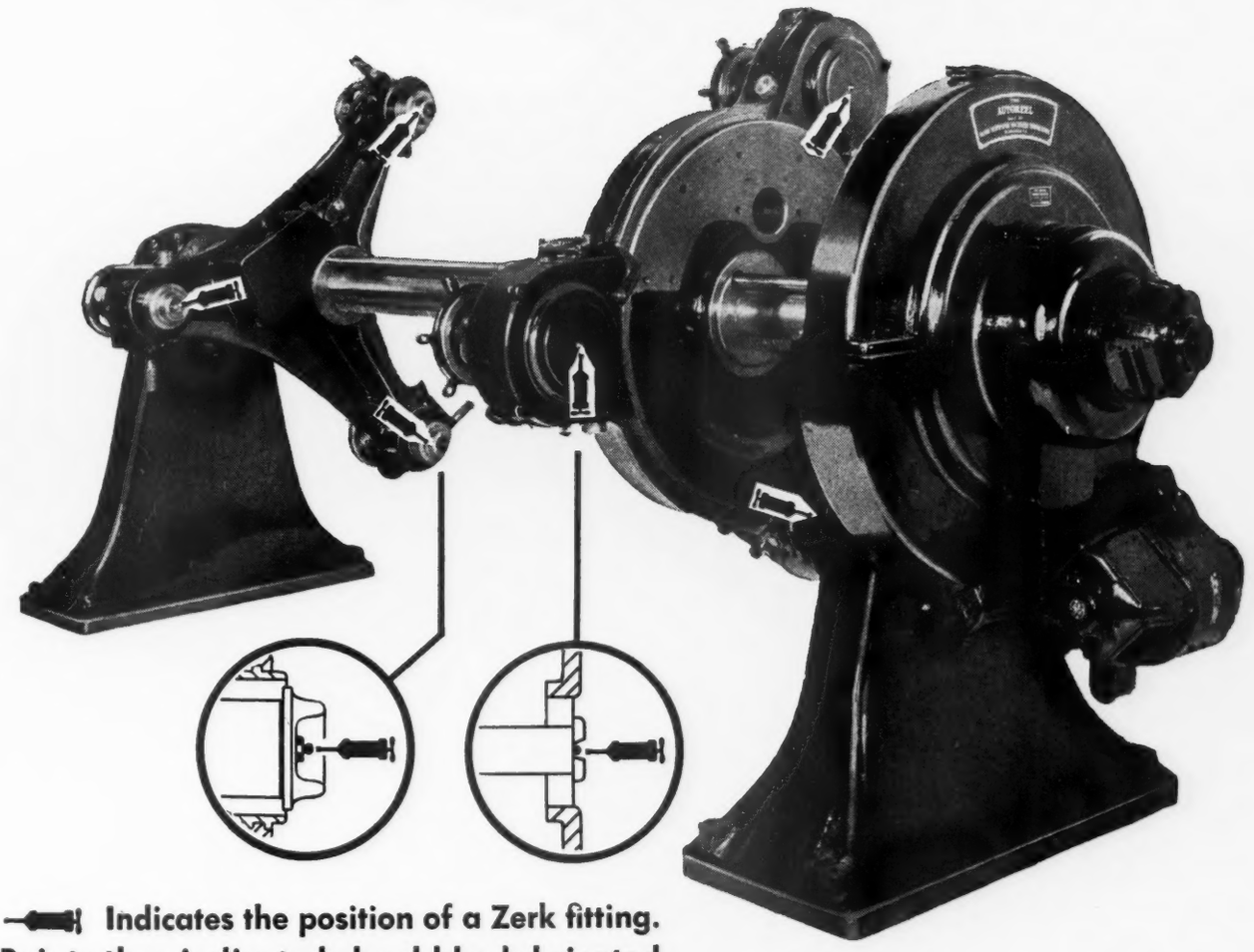
5 VERY IMPORTANT SAFETY FACTORS

CHAMPLAIN
STANDARD ROTOGRAVURE

CHAMPLAIN COMPANY, INC. • 636 ELEVENTH AVENUE, NEW YORK 19, N. Y.

MAINTENANCE SUGGESTIONS

LUBRICATION OF CHUCKS ON WOOD REEL



Indicates the position of a Zerk fitting. Points thus indicated should be lubricated with gun and a good grade of Alemite at least once a month. A few minutes spent when the reel is empty will repay itself many times over.

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD • NEW JERSEY

NEW YORK OFFICE

501 FIFTH AVENUE, NEW YORK 17, N. Y.

Wood NEWSPAPER MACHINERY

This is No. 36 in the Wood Series of Maintenance Hints. Reprints are available if your set is not complete

It's a REAL pleasure to pay so LITTLE for so MUCH!

Matrix Contrast Service more than "earns its keep" in our plant. Ever since our matrices were treated with Black and White, errors have been considerably reduced. Our operators catch errors BEFORE lines are cast, cutting operational costs and allowing more time to set live copy before edition time.

Linecasters are enthusiastic about Black and White, too. It reduces fatigue due to eye strain and helps them to turn out more work with less errors.

Yes, all the way through—Black and White Matrix Contrast Service does a big job! Putting my "John Hancock" on a check is often a chore—but this is ONE check I don't mind signing!

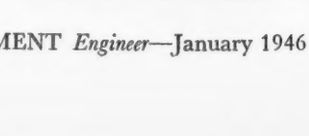
BLACK & WHITE

MATRIX CONTRAST CORPORATION

SOLE LICENSEES of the PERCY L. HILL MATRIX CONTRAST PATENTS NOS. 1,466,437 and 1,796,023

EMPIRE STATE BUILDING, NEW YORK 1, N. Y.

EUROPEAN AGENTS: FUNDITOR, LTD., 3, WOODBRIDGE STREET, CLERKENWELL GREEN, LONDON, E.C.1



This is a good-to-look-at pressroom don't you think? Aside from the looks, the walls and ceiling have been covered with Acousti-Celotex Cane Tile. Sound deadening is so effective that people in the pressroom speak to each other without raising their voices. Pressroom is in plant of the Colorgraphic Offset Co., New York, N. Y.

SOUND CONDITIONED PRESSROOM

produces good results at Colorgraphic Offset Co.

By FRANCIS A. WESTBROOK*

**Mechanical Engineer, Benson, Vt.*

WHEN the Colorgraphic Offset Co., New York, N. Y, moved to its new premises the presses were located in a long and narrow room. The arrangement was satisfactory except that it was soon discovered that the amount of noise generated by the machinery in such a long room was more than the employes could reasonably be expected to endure. An acoustical engineering contracting firm (Jacobson & Co. of New York) was thereupon called in with a view to applying sound conditioning treatment.

As a result, the noise was so sharply decreased that at present it is possible for people in this room to speak to each other without raising their voices when all the machinery is in operation. Before the sound conditioning it was barely possible to make oneself heard by shouting.

The means taken to secure such a high degree of noise abatement was actually very simple. It consisted of the installation of approximately 1800 sq. ft. of Acousti-Celotex cane tile Type C-4. This tile is 12 in. square and 1¼ in. thick and has many perforations. It has a sound absorption coefficient of 99% at 512 cycles and a noise reduction coefficient of 70%. The official definition of the latter is "the average of the absorption coefficients at the frequencies of 256, 512, 1024 and 2048 cycles taken at the nearest 5%."

Tile was applied to the ceiling and about half way on the long wall opposite the windows. It is usually unnecessary to cover all surfaces in a room in order to secure a satisfactory reduction of noise. It must be borne in mind that sound conditioning does not stop the noise at its source but causes it to die out faster. In an average room sound is reflected back and forth from ceiling to floor and wall to wall and this is amplified, just as light is reflected by a mirror The acoustical tile used for sound conditioning absorbs a large proportion of the energy of the sound waves, with the result that the sound is silenced much more quickly.

The acoustical engineer can calculate how to apply absorption in a noisy room to produce a satisfactory result. He knows the sound absorption capacities of the various materials already in the space and to what extent the noise can be decreased profitably by installing additional absorption. From this he can easily make his calculations. Obviously, it is necessary to analyze each noisy manufacturing area as a separate problem to secure the best results for a given set of conditions.

The perforated tile is shown very clearly in the photograph. It was applied by cementing directly to the existing wall and ceiling surfaces. This is a standard method and involves no pounding, drilling or other noisy and dusty operations. The work was done after 6 p. m. when the pressroom was closed for the day. The machines were covered with building paper and clean drop cloths to keep what little dust was made, by cutting some of the border tiles, from getting into the presses and other equipment. Thus there was no appreciable inconvenience or interference with production.

Although different types of acoustical tiles are available the perforated type was used here as it can be painted by ordinary methods without impairing its noise absorbing efficiency. This is important where clean white paint on ceilings and walls has much to do with the good lighting so necessary in a pressroom.

The management of the Colorgraphic Offset Co. believes that "any elimination of unnecessary noise is conducive to greater efficiency on the part of the worker. We made this installation on the basis of efficiency and consideration of our employees. We feel that on these two counts alone we were more than justified in making the necessary expenditure."

Northwest Conference

Color printing in newspapers will dominate the program of the Northwest Mechanical Conference which will be held at Hotel St. Paul, St. Paul, Minn. on February 16, 17 and 18. Engraving and line-casting machinist sessions will be held Sunday morning, February 17. Composing room and mailing room sessions will be held Sunday afternoon, and the press and stereotype meeting will be on Monday morning. A banquet will be given Sunday evening.

PIA Board To Meet

The Board of Directors of Printing Industry of America, Inc., will meet at the Homestead, Hot Springs, Va., on March 14 and 15. A principal item on the agenda will be the industry's national program to recruit veterans for the skilled trades and management positions in the industry.

The last lot of Harris 17 x 22 offset lithographic presses for the Navy are shown here in final stages of assembly. These presses will be delivered shortly, clearing the assembly line for work on Harris presses for the Graphic Arts industry.

Outlook For the Year 1946

By H. A. PORTER*

**Vice President in Charge of Sales, Harris-Seybold-Potter Co.*

HARRIS-SEYBOLD, like other manufacturers of Graphic Arts equipment, is faced with a backlog of potential business. The volume of prospective orders already listed is far beyond any volume ever known in peace time. This is the result of the production limitation orders placed on the Graphic Arts machinery industry by the War Production Board early in the war.

To meet the demand for Graphic Arts equipment, Harris-Seybold has undertaken a long-range program that calls for a production schedule more than double anything in the history of the company's manufacturing experience.

Equipment is becoming available now to a limited degree, but the tempo of deliveries will increase steadily each month until a constant stream of Harris presses and Seybold cutters is reaching the market. The schedule of increased production will be maintained with double shifts in the plants and also by subcontracting many items to firms capable of upholding Harris-Seybold standards.

Several important factors which tend to act as a drag on increased production are having an effect upon our programs, but every effort is being made to deliver on schedule despite restrictive conditions. Scarcity of gray iron castings is one of the major problems confronting our production engineers at the present time. The market for skilled labor continues to be tight in Dayton and Cleveland where the plants are located.

The Harris - Seybold manufacturing program is based on results obtained from a market study of the needs of our customers and prospective customers. This study was conducted through the Harris - Seybold "Purchase Proposal Plan", which enabled lithographers, printers, paper houses, and others to specify the types and sizes of equipment they wished to purchase in the postwar period.

The 1946 output will be delivered to those customers and prospective customers who have signified their intention to buy. At the present time they are being notified as to when they can expect delivery on the machinery for which they have submitted proposals. Customers who have not as yet evidenced their intentions cannot expect delivery until earlier proposals have been filled.

The new Harris presses and Seybold paper cutters will incorporate basic new design principles, the result of extensive engineering research and development. To date, only one of our new Harris presses has been introduced to the Graphic Arts industry, the Harris 17 x 22 shown at the NAPL convention in November. Other new Harris presses will be announced in the near future.

We are confident that the next few years will witness continued growth in the Graphic Arts industry, particularly in lithography.

Huebner Comments Upon 1946 Equipment and Industry Trends

By WM. C. HUEBNER*

**President, Huebner Laboratories, New York, N. Y.*

IN response to inquiries from the industry, we expect to be ready to supply our regular line of equipment about April, 1946. The specific lines that we expect to introduce consist of the following items: 1-plate 1-shot 4-color cameras; colorvalhue matchers; juxtaposing screens; cylinder making equipment for relief image cylinders to be used in electronographic and dry offset presses; preregister image equipments; phototextype composing machine cameras; display type compositors, and electronographic and dry offset printing presses.

We believe new trends in the industry will be away from separate plates such as electrotypes and stereotypes. These will be replaced by light-weight cylindrical tubes carrying all images in predetermined register just as we are now doing on flat plates for offset presses. The tubes will be arranged for quick insertion and removal from the press, with the image surfaces true enough on the ground surface of the cylinder to avoid all makeready.

The trend toward this kind of printing will be obvious since shorter hours per week plus increased pay can be met only by providing for greater production with less waiting time in the pressrooms for makeready operations.

Materials Handling Bulletins

Types of loads and economical methods of handling them are dealt with in four bulletins issued by The Elwell-Parker Electric Co., Cleveland, builder of power industrial trucks. These bulletins supplement the booklet "Industrial Logistics: A Survey for Management" recently issued by the company. They are titled "The Logistics of Boxes"; "The Logistics of Barrels"; "The Logistics of Bags"; and "The Logistics of Bales."

The basic principle of "Industrial Logistics" is the selection of the correct type of container for each product or commodity to be transported; assembling these containers into master unit loads on pallets or skids, and transporting master unit loads as single units on power industrial trucks, tractors or cranes through every phase of the industrial cycle.

Copies of the bulletins and booklet may be obtained gratis by addressing The Elwell-Parker Electric Co., direct, or through *Printing Equipment Engineer*.

Outlook For New Printing Equipment

By E. G. WILLIAMS*

**President, American Type Founders Sales Corporation, Elizabeth, N. J.*

SINCE VJ-Day, reconversion to peacetime manufactures has been progressing with accelerated speed at our plants in Elizabeth, N. J., and Mt. Vernon, N. Y. While we are still faced with short supplies of some items, notably gray iron castings and electrical equipment, we are hopeful that these will continue to improve as we approach peak production.

By January 1, 1946, we hope to begin deliveries of the first C-Kellys and our Big Chief sheet-fed offset presses to holders of ATF Civilian Priority Delivery Certificates in the order of their preference. Present production schedules call for delivery of other models of both our letterpress and sheet fed offset lines by early spring, and we expect to step up deliveries gradually until peak production is reached in the fall of 1946.

Deliveries by our suppliers have already started on many lines that we handle such as composing room equipment, proof presses, cutters, drills, cameras and platemaking equipment, and most supplies. These, too, will be "stepped up" throughout 1946 until the present backlog of orders is filled, probably sometime late in the year.

ATF will introduce some other new products during the year of practical value to printers. Announcement of the specific nature of these products will be made from time to time.

Every attention is also being given to the development of new products and new processes in the Graphic Arts field by a staff of specially trained research engineers. The results of this research will be made available to the printing industry as fast as practicable.

During the war ATF developed a number of helpful suggestions for printers on how to make the best and most profitable use of their equipment, and how to prepare to meet the problems of the peace. These have been made available to printers everywhere through trade associations and employers' groups with gratifying results.

As business generally moves forward into full peacetime gear, the printing industry as a whole can look forward to a healthy participation in the prosperity that lies ahead.

EMPLOYMENT
AND SERVICE

Employers, production and mechanical executives may insert notices in this department. Items may pertain to the following subjects: "Executive Wanted," "Association or Partnership Wanted," or "Position Wanted," readers referring to subjects of a personal nature such as obtaining information about addresses of executives, supplying copies of technical articles and magazines, patents for sale or requests for contacts for developing and/or financing of inventions. Any reasonable request by an executive on a subject other than those listed will be granted cheerfully.

Notices may be printed under the following regulations: First insertion (maximum six lines) is free of charge. All subsequent insertions of the same item subject to a charge of 75c per line in advance.

Address all communications with box number to *Printing Equipment Engineer*, 1276 West Third St., Cleveland 13, Ohio.

WANTED—Labor saving attachment for any printing press. Will buy outright, manufacture on royalty or handle exclusive distribution. Must be patented or patentable. Reply Box No. 246.

Thy-mo-trol Electronic Motor Control

By E. H. ALEXANDER*

**Engineer, Control Division, General Electric Co.*

CONTROLLED electronic rectifiers have been used to supply regulated power to direct-current motors for more than 18 years, but only within the past four years has a packaged system for a complete, wide-range, variable speed drive come into its own. During this short period of rapid expansion we have seen a previous limit of 15 h.p. extended to an operating installation of a 40 h.p. drive. Now a 75 h.p. drive is in the building and we already look with eagerness to a prospective 600 h.p. drive.

NEW APPLICATION OF AN ADHESIVE TO FACILITATE SHERIDAN CASEMAKING OPERATIONS

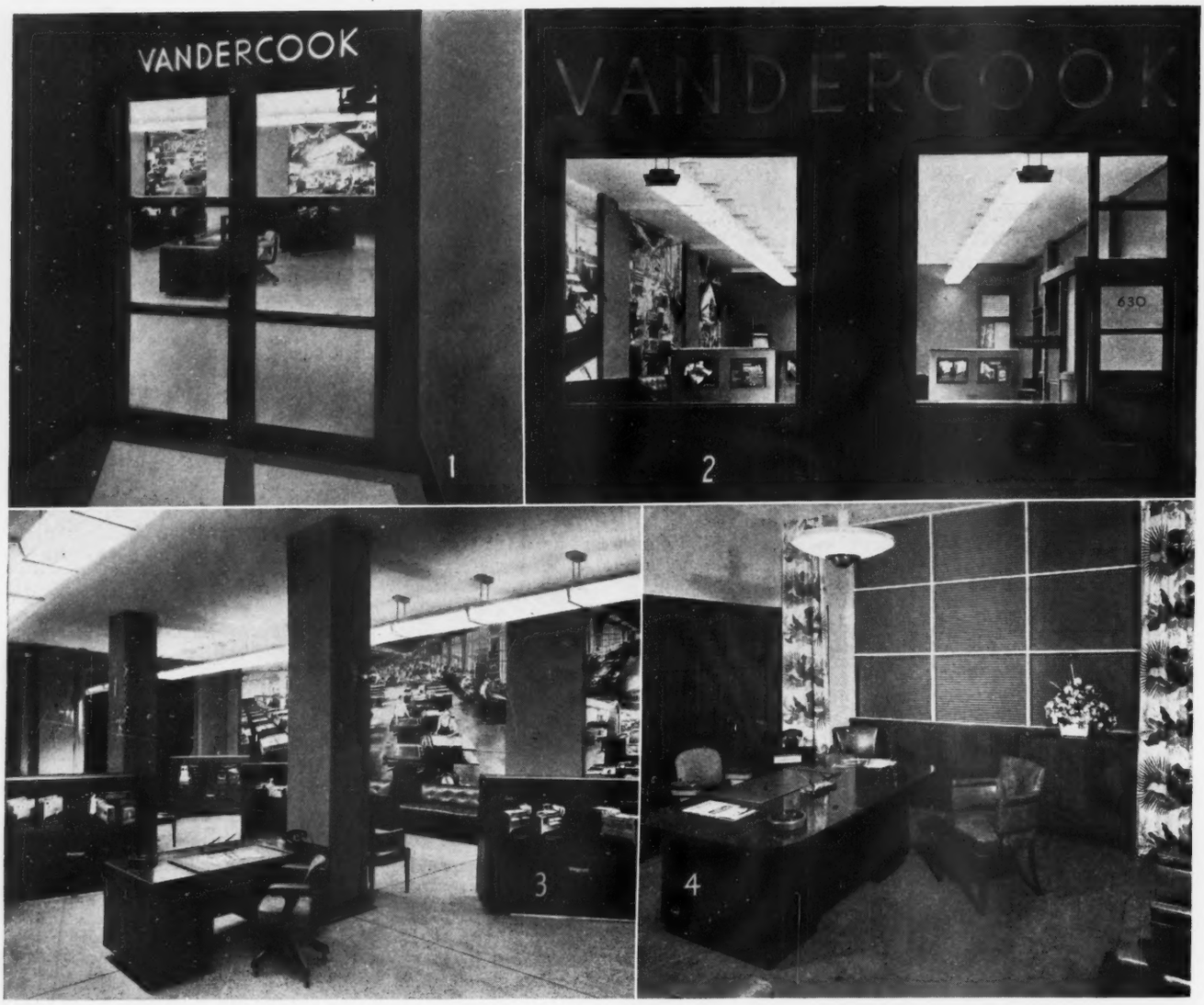
BECAUSE of the necessity of speeding up production in the application of slate drilling to book covers in the Government Printing Office, the possibility of producing such covers on a Sheridan casemaking machine was investigated. This machine operates at a higher production speed than the Smythe casemaking machine. The problem involved was one of adjusting the consistency and setting rate of the adhesive to the nature of the fabric to insure its adhesion to the covers at the speed of operation of the casemaking machine.

Slate drilling is an open-weave fabric containing little or no starch sizing. Because of this lack of sizing, adhesives of low viscosity tend to pass through the porous mesh of the fabric interfering with the proper and satisfactory operation of the casemaking machine and marring the surface appearance of the finished cover. Casemaking adhesives of high viscosity applied hot, tend to set too quickly for use in the Sheridan casemaking operation. A study revealed that for this operation, a flexible glue is more suitable than a casemaking glue for applying slate drilling. The presence of a plasticizer in flexible glue prolongs the setting time to coincide with the machine cycle of operation and therefore permits the use of high viscosity glue mixtures for this purpose. Slate drilling now gives satisfactory results when applied to book covers on the Sheridan casemaker when a flexible glue, made according to the following formula, is used:

Ingredient	Percent
Glue (400 grams gel strength)	36.40
Water	46.90
Glycerin	16.40
Beta Naphthol	.15
Terpineol	.15
Total	100.00

The use of slate drilling on the Sheridan casemaking machine has resulted in a considerable saving in labor and equipment hours over its use on Smythe machines. The Sheridan casemaking machine produces approximately three times as many covers as a Smythe machine in a given operating period.

—Courtesy **The Capital Craftsman**



1. Entrance to Vandercook & Sons new showroom from lobby of Transportation Building, in which it is located.
2. Exterior night view of Vandercook & Sons new showroom.
3. Interior view of Vandercook & Sons new showroom, showing display cases with illuminated transparencies of Vandercook equipment. In the background may be seen three photo-murals.
4. Modern executive office in new Vandercook & Sons showroom.

Proof Press Manufacturer Opens Chicago Salesroom

VANDERCOOK & SONS have announced the opening of a sales and display room in Chicago, just outside the downtown shopping area in the Transportation Building, at 630 So. Dearborn St.

In planning the new display room, stated General Manager E. O. Vandercook, Vandercook & Sons had two objectives in mind. First, the advantage of exhibiting all of the company's Proof Presses, Block Levellers and Gauges in one salesroom. The second objective was to find a convenient location, since the Vandercook plant is situated on the west side quite a distance from the main section of Chicago.

The Vandercook showroom contains unusual but practical ideas in design and decorative treatment. Illuminated by fluorescent lighting, its furnishings, arrangement and color scheme have been carefully chosen.

Vandercook equipment is expected to be displayed as quickly as production is large enough to permit the use of proof presses for display purposes. Meanwhile, Vandercook designed and built a series of display cases to substitute for the actual machines. Each case contains four enlarged and illuminated reproductions of Vandercook presses on glass transparencies which the visitor may examine.

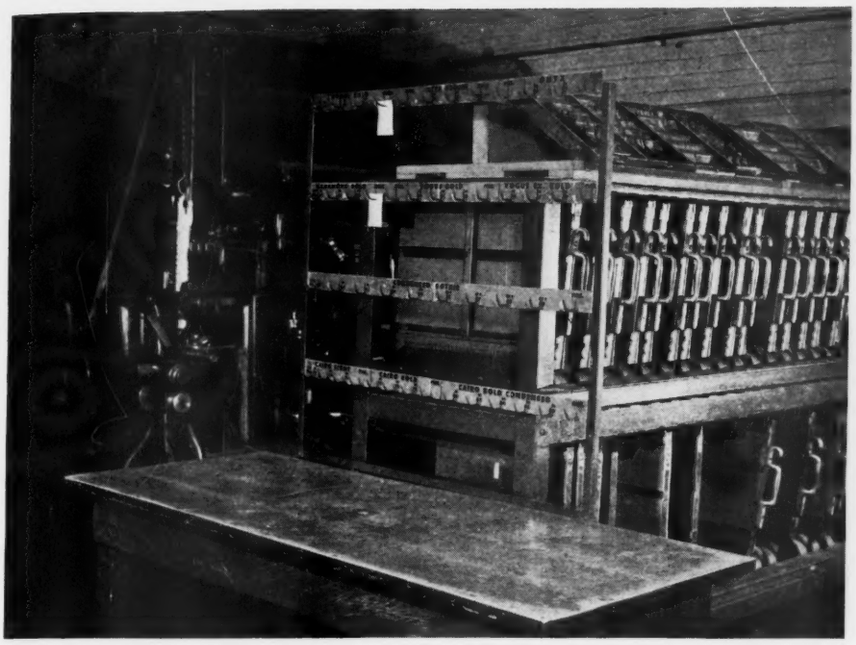
To observe proof presses in actual operation, special motion picture equipment has been installed. This consists of a cabinet provided with a screen placed at eye level, on which the movies are projected by a machine behind the screen.

In the room are three almost life size photo-murals which practically cover one wall. One of these shows a battery of ten Vandercook presses as installed in the New York plant of Conde Nast Engravers, Inc. Another mural is a view of the 400 ft. assembly line in the Vandercook plant, while the third presents a series of interior and exterior scenes of the factory.

Cushioned seats are installed along the wall of murals, in addition to more conventional types of lounge chairs. There is also an executive office to provide facilities for conferences with the sales staff, customers and prospects.

Among the members of Vandercook's sales staff, who will make the showroom their headquarters, are Louis Larson and Roy Sandvik, the latter a young man just out of service, after serving five years in the army from private to 1st lieutenant.

Announcement has been made by E. D. Buchanan that Lieut. Com. P. A. Van Vlack, Jr., has returned to the Moser Paper Co., 621-631 Plymouth Court, Chicago, after serving three years on board ship in the Aleutians and the Atlantic. He resumed his position early in December.



View of line-composing machine display section at the Dayton (O.) *Journal-Herald*. This compact arrangement is discussed in the accompanying article. The copy rack was made by Chief Composing Machinist Russell Knell.

Efficient Display Copy and Composition Handling System at Dayton (O.) *Journal-Herald*

A COMPACT, well arranged system for setting display type on Intertype line-composing machines is in use in the composing room ad alley of the Dayton (O.) *Journal-Herald*. The system consists of four elements: (1) A type specimen book, (2) an ad copy display copy markup system, (3) a copy rack and table dump, and (4) two G-4-4sm Intertypes with a double-faced split magazine rack set between the two keyboards and which permits either of the operators to pull out and replace any magazine from either side of the rack. The result is that copy flows from the copy desk and through the machine composition facilities with greatest speed.

In explaining the composition system in the *Journal-Herald*, Production Manager Tom Gougarty said all of the type faces are listed in a specimen book. The type faces are shown in one-line specimens each of all capitals, and capitals and lower case, set 30 picas wide. The type faces have been numbered serially. Figure symbols only are used to indicate type sizes to the operator and ad compositor on the copy. These are shown in bold face type at the left side of the type specimen lines. Incidentally, the name of the type face and its point size is also given—but as stated before, it is never used in the plant for marking copy. Under the symbols at the left of the specimen lines are placed the machine numbers upon which any particular type face may be found.

It can be seen from the above description that all advertising copy is run out to the compositor or operator by number. Each type face runs in series, *i.e.*, Condensed Gothic 10 pt. is No. 60; 12 pt. is No 61, and so on up to 60 pt., which is number 69.

In marking up advertising copy, the number symbol only is used — never the name of the type face. If lines are to be set in capitals, they are so marked. Italic is marked with an "X". The markup system is used on all other machines in the composing room. Mr. Gougarty stated a markup system of this kind eliminates many magazine changes during the course of the day.

Because the display copy handling method is easier to explain, we will refer to the halftone picture accompanying this article. The copy rack is made from two upright angle iron pieces and the four cross bars from flat iron strapping. On the four cross bars are mounted 49 hooks (the number varying on each cross bar according to type face). Each hook is numbered according to the type face series and above the numbers is carried the regular name of the face. The labels were made from zinc in the photoengraving department.

Immediately under the copy rack is a

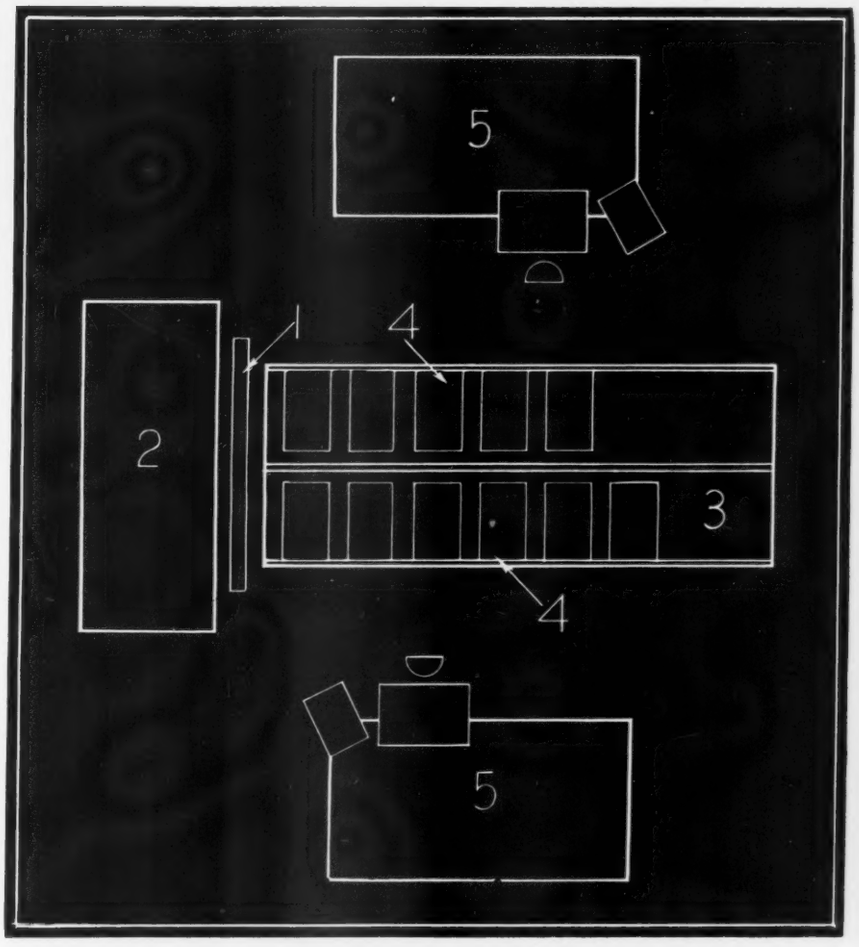


Diagram (not drawn to scale) represents layout of display composition system at Dayton (O.) *Journal-Herald*. The various units are identified as follows:

At *1* is indicated the frame on which are mounted copy hooks; *2* is the table on which copy and slugs are deposited; *3* is the magazine rack with sorts trays *4* arranged along inclined top; at *5* are shown the two Intertype display machines.

metal top table upon which the operators dump slugs and copy.

As will be seen by referring to the diagram, the two Intertype G-4-4sm machines face the magazine rack which is placed at right angles to the copy rack. The two machines carry 31 magazines. Either operator can pull out a magazine from either side of the magazine rack. The magazines are labeled on two sides with zinc labels which give the type number and the matrix number. The magazines roll outwardly on leather belting which rotates on small pulleys.

Ad Shrinkage Chart
At Dayton (O.) *Journal-Herald*

3 Inches	18½ Picas
4 Inches	24½ Picas
5 Inches	31 Picas
6 Inches	37 Picas
7 Inches	43 Picas
8 Inches	49 Picas
9 Inches	55½ Picas
10 Inches	61½ Picas
11 Inches	67½ Picas
12 Inches	73½ Picas
13 Inches	79½ Picas
14 Inches	85½ Picas
15 Inches	92½ Picas
16 Inches	98½ Picas
17 Inches	104½ Picas
18 Inches	110½ Picas
19 Inches	117 Picas
20 Inches	123 Picas
21⅛ Inches (full)	131½ Picas

Making Plates

For Colored Comics

By ADAM HENRI REISER

FLUX is the order of life. A steady stream of ideas and not-to-be-denied changes are indications of life itself. With the advent of the war, for illustration, came many emergency conversions. There must be present the flexibility with which to take advantage of conditions. It is true of body, government or industry—and it is true of printing, too.

One photo-engraving establishment, noted for high quality work, experimented with cartoons in color put up in book form when its volume of work tapered off. Through use of a shortcut in production methods, a goodly portion of this plate-making work now has been corraled by this firm, a condition that finally led to devoting time exclusively to the production of plates for colored comics.

This colored comic cartoon printing, by the way, has been the subject of some study. It has many angles. Outstanding is the syndicate feature in newspaper supplements. It has been said that without this feature, at least one big publisher would be out of the newspaper picture right now.

One method of producing the plates used in the printing of these newspaper colored comic supplements was interestingly told in an article replete with illustrations in the *Popular Science Magazine* some time ago.

Conventional Plate-Making in Comics

Standard procedure making plates for newspaper comics in color runs as follows. A reduced line photograph the required size is made from the inked outline drawing without color. The original drawing, of course, usually is made larger than the finished subject. The line shot is stripped from its glass support if it is a wet-plate negative, or removed from its thin base if it is strip-film. In either case the membrane or negative film is turned and stripped to clean glass. Four prints on zinc are then made from this negative after the metal has been coated with a light-sensitive solution, usually a cold-top enamel.

Development with a stained alcohol follows exposure. The blue image left reposing on the surface of the metal by development consists of outlines which form the guide lines for the artist in laying down his tints. One plate containing these outlines intact is to be used for the black with the addition of Ben day tints. The remaining three plates are to be used for the yellow, red, and blue printing plates. Benday tints are laid to the outlines or where needed for each color, at the proper angles. Solids, too, are painted in as indicated by the inked original drawing. Colors may be shown on this original as an overlay on tissue.

Etching follows to lower the level of the place where there is no work. At least three etches or bites are necessary to remove this metal to a depth sufficient to prevent contact with the inking rollers as they pass over the plate in printing. Some etch broadly, just using the router to clear up the bottoms; others etch only a good clearance outside the work limits, and then complete removal of the dead spaces by routing.

After all plates are completed, mats are made from each for distribution to the section of the country where actual printing takes place. There, curved plates to fit the cylinders of the printing presses are made from the mats, and the plates then locked on the cylinder, ready for the run. These mats enable publishers in other centers to make use of the same series of pictures at a great saving, for the mats are furnished at a low cost. Individual leads and ads can then be included to satisfy local consumption.

Short Cuts for Children's Comic Books

While the above method is the conventional one for newspaper colored comic production as well as for children's books of comic strips, short cuts have been devised. One makes use of screen formations hidden in such shading medium drawing boards as produced by "Craftint" or found in "Washtone." Craftint's use for copy preparation has been described in the May 1937 issue of *Printing*

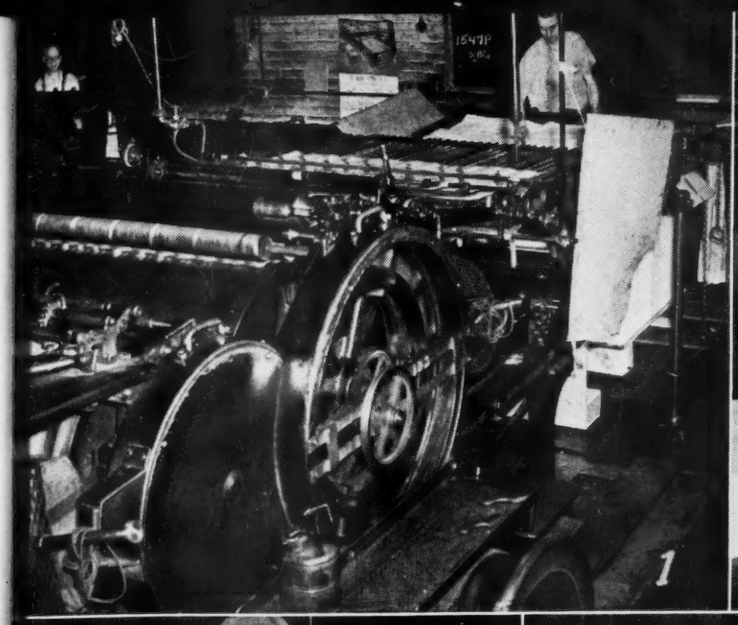
(*Continued on Page 36*)

Spraying Rollers

SPRAYING rollers has been tried in a number of plants and it is found that the mist adds the moisture the composition roller needs to withstand the friction, heat and materials in ink together with dirt and dust from the paper and the air, all of which tend to reduce the precious tack of the roller. However, some executives find it advisable not to use glycerin in the spray, water alone having proved satisfactory. After using the sprayed moisture on rollers which had apparently lost their tack for a few weeks in a number of plants, it was found that the desired tack was restored and the used rollers performed like seasoned new rollers. It seems that the roller spray is effective in counteracting the conditions present in pressrooms especially during the cold months, when the pressroom temperature in many plants ranges between eighty and eighty-five, which are responsible for loss of tack by the roller.

It is clear that rollers made for use at an average temperature of 70 deg. are bound to lose their moisture content, which gives tack to the gelatin in spite of the glycerin used to hold the moisture, if the rollers are used at higher temperatures. It is analogous to storing the rollers in a closed closet at the higher temperatures. A demonstration of the result may be seen in spreading glycerin in the open lid of an ink can and noting how the glycerin dries up at high temperature in a dry closet. Many a winter roller in good condition, after having been carelessly stored close to a steam radiator in a highly-heated pressroom, and forgotten, is found to be without tack and almost horny when wanted for use on the press.

The spray definitely combats the siccative conditions which rob the roller of its moisture and tack.



(Acme Photos)

GOOD BOOK IS "BEST SELLER" WITH FIGHTING MEN — In the trenches and on the home front, fighters and their families turned to the Bible for inspiration and comfort in the recent Armageddon. Production figures of the world's largest Bible publishers, in Cleveland, show that soldiers, sailors, marines and their families created a demand that has resulted in the printing of 40% more Bibles.

"The demand for the Bible is an eloquent answer to Hitler," says Benjamin D. Zevin, vice president of the World Publishing Company which turns out the Bibles. He explained that the many hundreds of thousands of sacred books desired by men and nurses in the Armed Forces, at home and abroad, did not take into account Bibles distributed free of charge by the Gideon Society which has supplied fighters with over 3,000,000 volumes since Pearl Harbor.

A new edition of the company, which ships out a half carload of Bibles every day, is the Blue Star. Bound in white with a Service Flag in full color on the front cover, it is especially designed for loved ones of men in service.

These pictures show major operations in the production of Bibles, which were best sellers long before the advent of the book-burning Nazis and which will serve to uplift mankind long after "Mein Kampf" and its author are moldering in oblivion.

1—MODERN SCRIBE—In a single motion, 128 Bible pages roll off this gigantic press, situated in one of the six units of the 280,000-square-foot plant. Robert Pinnow operates the Miehle Perfector, one of the largest printing machines made. Every year, the World Publishing Company spends from $40,000 to $50,000 to change plate styles and keep up with popular printing types.

2—HALF - CARLOAD PER DAY — This clean-looking gathering machine whisks together the various sections of the Bible. Robert Wells checks the assembling of one half-carload of Sacred volumes each day.

3—BIBLE SEAMSTRESS — Ruth Harder, one of the 400 employees of the World Publishing Company, uses a sewing machine to stitch together sections and complete the Bibles. Several of her co-workers were with the company when it was founded, forty years ago in a one-room loft.

4—FOR POCKET OR HOME—Rose Noga holds the largest and the smallest of the 39 editions of the Bible put out by the Ohio publishing plant. The tiny volume is a 25-cent Vest Pocket Testament, a favorite of soldiers on United States battlefields. The large deluxe book, with pages edged in gold leaf, is the Master Art Edition of the Complete Bible which sells for $7.

5—LAST LOOK—Stack after stack of the most widely read book in the English speaking world is glanced through every day by Mary Wodek. She catches any flaws in the finished Bibles which are now ready for shipment to mail order companies, stores, and bookshops throughout the nation.

MOLDING PRINTING TYPES

From Plastic Substances

By STAFF WRITER*

**Technical information in this article taken from notes by Walter Reppe and Claus Heuck, of Frankfort-on-the-Main, Germany, and translated from the German.*

INTEREST in the development of printing types from organic substances has prompted us to review discoveries of chemists and engineers working with the firm of I. G. Farben Industries in Germany until our bombers wrecked these plants in 1944 and 1945. The September 1945 issue of *Printing Equipment Engineer* carried an article by Dr. M. E. Laeis, *Printing Types From Plastics* which described methods and machines used for molding plastic types for hand composition. In this article we will endeavor to analyze the composition of chemicals and methods of compounding these elements to provide a suitable synthetic for molding plastic types.

While there has been considerable research and experimenting with plastic types and molding methods in the U. S. in recent years, no satisfactory printing type made from synthetic materials has been made available to commercial printers. However, recently announced developments in the curing of rubber and plastics by electronics in the B. F. Goodrich Rubber Co. plant, and other plants, may speed up molding cycles to a point where materials of low specific gravity may be molded in conventional composing machines. Successful application of electronic energy has already been employed to speed up the curing time of rubber and plastic duplicate printing plates according to a release by the Bryant Electric Company.

In preliminary tests, I. G. Farben chemists proposed to replace metals for printing types with organic substances of the phenol-aldehyde resin or polystyrene derivatives. However, these substances did not fulfill the high requirements for molding or printing because they were too brittle and cracking and chipping was noted. Furthermore, the phenol-aldehyde resin is a thermosetting plastic and could not be recast because in the hardened state it is no longer fusible. Although polystyrene is a thermoplastic and can be re-softened repeatedly, this synthetic proved to be not only too brittle for type but was not sufficiently resistant to type washes. To obtain an exact reproduction of the matrix containing fine lines and serifs the plastic substance should be sufficiently hard to retain all the detail and at the same time withstand repeated molding without being adversely affected. Because of the necessity for cleaning the type with benzine and alcohol, a suitable plastic must be insoluble in these solvents. Certain plastics swell and soften upon contact with type cleaners and impart a distorted print, hastening premature wear similar to molded rubber plates before the introduction of synthetic rubber gums of the Buna and Neoprene types.

Further experiments revealed that a plastic composed of interpolymerized products of styrene with acrylic nitrile or methacrylic nitrile could be used to best advantage for molding types of plastic. This material also proved fairly suitable for molding printing plates. Interpolymerization products which have been prepared by polymerization in aqueous emulsion are claimed to be suitable. The substances thus obtained are distinguished by hardness, toughness, insolubility in benzine and stability to kerosene, gasoline and alcohol. Adequate resistance to benzine is obtained by the addition of 2 per cent of acrylic or methacrylic with styrene. For producing resistance to kerosene, gasoline and alcohol, larger amounts of acrylic nitrile, from 30 to 50 per cent, should be added. Stability to these type cleaners may also be increased by interpolymerizing styrene and acrylic or methacrylic nitrile with amounts up to 25 per cent of the whole mixture, of methacrylic acid, methyl ester and/or polymerizable compounds of butadiene, divinyl-benzene or diethylene glycol divinyl ether. Vinyl esters of the unsaturated acids such as crotonic acid vinyl ester may also be used.

The products thus obtained may be molded in their natural colors or mixed with dyestuffs or fillers. The dyestuffs or fillers may be added during the preparation of the substances, e. g., to the emulsions of the monomers or polymers when polymerizing in aqueous emulsion or to the monomers when polymerizing in a block. Greater hardness and a higher melting (softening) point may be desired, in which case small amounts of other vinyl compounds such as vinyl-carbazole may be added to the composition.

Plastic type weighs about one-eighth as much as metal type. This would mean that if a galley of metal type weighed 96 lbs., the same galley of plastic type would weigh 12 lbs. This lighter weight would be advantageous in storing and transporting. Plastic types are claimed to possess a high degree of dimensional accuracy. Their physical and chemical properties prevent corrosion and effects of humidity. Wearing qualities are also claimed to be comparable to metal and because of their high affinity for ink a sharp reproduction is obtained with minimum makeready on the press. The physical properties of the substances described are such that they may be repeatedly softened and used for molding new types.

The Robbins Publishing Co., Inc. has announced the appointment of George R. Ramel as general manager of the *American Printer*. Mr. Ramel was in charge of the Robbins Company's Cleveland office in 1940 when he entered the service as a first lieutenant of infantry. He served overseas with the 37th Infantry Division in the Pacific, and was promoted to the rank of major in 1943. Mr. Ramel has just recently returned to civilian life, and will carry on his duties from the New York office of the Robbins Publishing Company.

Low Temperature Causes Registration Problems

COMPOSITION rollers may shrink and lose much of their efficiency if exposed to cold. Inks increase in viscosity and may require reducing to avoid picking. Their distribution and printability may be impaired so that it is hard to get a good print and avoid offset. Many printers know how many cases of offset and static are due to bringing cold paper to the press. The most serious problem is wavy edges of sheets which render register and continuous operation of automatic feeders very difficult and uncertain and the problem is multiplied by the number of times the sheet must go through the press. What can be done about it?

Records kept by large printers and lithographers show that paper brought into the pressroom in cold weather direct from cold warehouses, railroad cars or delivery trucks, at low temperature is sure to develop wavy edges when exposed to the warmer air of the pressroom, the moisture condensation being absorbed more rapidly by the edges than the center of the pile of paper. Tests with piles of paper on skids and in conta ners show that very cold paper, in the pile, warms very slowly. Paper 50 deg. colder than the pressroom atmosphere required 96 hours to arrive at temperature even with that of the pressroom. The recommendation has been made that to avoid register, feeding and other troubles, paper should be at pressroom temperature when printed and if and when it must be brought into the pressroom cold, it should be left sealed in wraps or containers or immediately covered all around with waterproof wraps if on skids. Since the local atmospheric conditions vary, it is advisable to allow the paper to remain in the wraps three or four days before printing so that it may arrive at pressroom temperature without absorbing excess moisture on the edges with the resulting troublesome waves.

Linotype Is On the March!

Its war record must speak for itself. As our peacetime performance gains momentum, the achievements of nearly sixty years of service to the graphic arts will be equalled and surpassed.

With maximum volume scheduled, Linotype standards of quality in materials, workmanship and inspection are relaxed not one iota. No "ersatz" metals are being introduced and inspections are just as rigid as they always have been. Of this you may be sure.

Each week, as our production curve swings upward, we are far more pleased than any individual buyer of Linotypes possibly could be. Yet, with all such efforts, the stack of orders is not—cannot be—reduced as fast as we would like.

Matrices, parts and supply orders, too, are receiving every attention and the service to which Linotype users have long been accustomed will eventually be an actuality. We look forward to the time when the conditions brought about by the war will be but a memory.

The resources of the Linotype organization, in the factory and around the world, are being devoted to this objective—always consistent with Linotype standards of quality.

LINOTYPE

LINOTYPE · BROOKLYN, NEW YORK

Linotype Caledonia and Bodoni Italic

EXECUTIVE ¶s

Philip Schneider, who is well known to many printing executives throughout the United States will assume the mechanical superintendency of the Star-Bulletin Company in Honolulu, Hawaiian Islands, commencing March 1. Several years ago, Mr. Schneider was associated with the production department of Crowell-Collier Publishing Co. in Springfield, Ohio. For several years during the war he was engaged exclusively

Philip S. Schneider, formerly with Printing and Publishing Div. of WPB and more recently of the Marines, has been appointed Mechanical Superintendent of the Honolulu *Star-Bulletin* Company, Hawaiian Islands.

with the Printing and Publishing Division of the War Production Board in Washington, D. C. While with the Division, he served in a number of capacities, finally becoming Deputy Director of the Division. In 1944 he became a marine. Up until his discharge the first of this year, he was in charge of publication of the Pacific edition of *The Leatherneck* which is published for overseas marine corps. Before departing for Honolulu he will travel mostly through the Eastern section of the country.

The Chicago plant of the Imperial Type Metal Company announces the following sales personnel appointments: W. S. Coulson, recently discharged from the U. S. Marine Corps, will make his headquarters in St. Louis. He will cover Missouri, Illinois, Iowa and Arkansas. Robert W. Knappage who was recently discharged as First Lieutenant U. S. Army, will make his headquarters in Cleveland. He will cover the northern half of Ohio. This firm also announces the return of R. A. Buhl from long service in the U. S. Navy to the sales force. He will assist William D. Howell in Michigan and northern Indiana and will make his headquarters in Detroit.

R. D. Ross has joined the sales staff of the Moser Paper Co., at 621-631 Plymouth Court, Chicago. More recently, Mr. Ross served as Chief of the Commercial Printing Section of WPB's Printing and Publishing Division in Washington, D. C. Mr. Ross is well known to many Craftsmen throughout the country.

James I. Beall, dean of printing supply salesmen, died in Akron, Ohio, December 15 at the age of 77 from complications following pneumonia. Mr. Beall started in the printing industry as a country printer and newspaper editor in North Carolina and founded the *Land of the Sky Blue Waters Press* in Ashville, N. C. He then went on the road, selling printing equipment for Dodson Printers Supply Co., Atlanta, Ga., and was with that firm over twenty years. Later on, he was central-west sales manager for the Oswego Machine Co., traveling out of St. Louis. He also traveled for awhile for the old Barnhardt Bros. & Spindler Co. through Indiana and Ohio. He operated his own printers' supply business at 31 W. Market St., Akron, Ohio for the past thirteen years. Mr. Beall is survived by his widow, Mrs. Sally P. Beall and two sons, Lt. (jg) Wm. E. Beall, USN, and O. D. (Jack) Beall of Chicago. His older son, Major H. I. Beall, AAF, was killed in an operational accident over Belfast, Ireland in March, 1943.

Fred J. Hagen, sr., of the Workman Mfg. Co., Chicago, passed away in that city on Friday, January 4. Funeral services were held from the North Shore Methodist Church on Tuesday, January 8. Mr. Hagen was a past president of the Chicago Club of Printing House Craftsmen and the International Association of Printing House Craftsmen. A tribute to Mr. Hagen was extended by the Chicago Club on Tuesday night, December 18 at the Furniture Club in Chicago in the form of "Fred J. Hagen, sr., Night." Mr. Hagen's son, Jack, is active in affairs of the Chicago Craftsmen's Club.

Lieutenant Commander Charles H. Stout, USNR, has rejoined Matrix Contrast Corp. as vice president and sales manager after serving in the Navy since April, 1942. Stout, who has been with Matrix since February, 1929, goes on inactive duty in the U. S. Naval Reserve

Lieut. Comdr. Charles H. Stout, USNR, has returned to Matrix Contrast Corp. as vice president.

on December 22. Called to active duty at the Naval Air Station, Quonset Point, R. I., Lt. Comdr. Stout subsequently served at the Gulf Sea Frontier, Miami, Fla.; San Julian, Cuba; and Isle of Pines, Cuba. Requesting Pacific duty in August, 1944, he was sent to the Hawaiian Sea Frontier with headquarters at Pearl Harbor. In the Pacific he held the post of air controller until Sept. 1945.

T. M. Broadston, according to Vice President J. C. Dunn of the Vulcan Proofing Co., has joined that company as sales manager of the Blanket Division. He will continue his usual activities among lithographers in metropolitan

Vulcan Proofing Co. announces T. M. Broadston's appointment as manager of the Blanket Div.

New York. He will have general supervision of the sale of newspaper and lithographic blankets throughout the United States.

Fred A. Weymouth has been named manager of International Printing Ink's Chicago Factory. The assistant factory managership vacated by Mr. Weymouth will be filled by Charles Rietz, former head of IPI's Varnish Laboratory and head of varnish production. F. Jack Jeuck, former factory manager, is now IPI's Western District Manager.

Fred Reiser, Jr , Cincinnati district manager for the Industrial Division of The Timken Roller Bearing Company since 1944, has been named division manager for all divisions of the company there, including Industrial, Steel, Automotive, and Service-Sales, effective December 1, company officials announced.

Four members of the Promotion Department of Interchemical Corporation, Empire State Building, returned recently from their duties with the armed services, according to an announcement by George Welp, Director of Sales Promotion, Advertising and Publicity. Lieut. David Donovan, USNR, takes up his position as an assistant advertising manager. He will devote his attention to the advertising and sales promotion of Interchemical's International Printing Ink, Industrial Finishes, RBH and Export Divisions. Sergeant Doris Massam, WAC, will resume her position as Mr. Donovan's secretary. Lieut. James D. Doyle, USCGR, and Sergt. Larry Luther, AUS, returned to their former activities in production and traffic control for the department, and additional duties and responsibilities necessitated by the expanded markets and newly acquired divisions of Interchemical Corporation.

WITH THIS NEW HOE

Color-Convertible

Spot Color or Multi-Color Printing

— is merely a matter of simple conversion whenever the need arises.

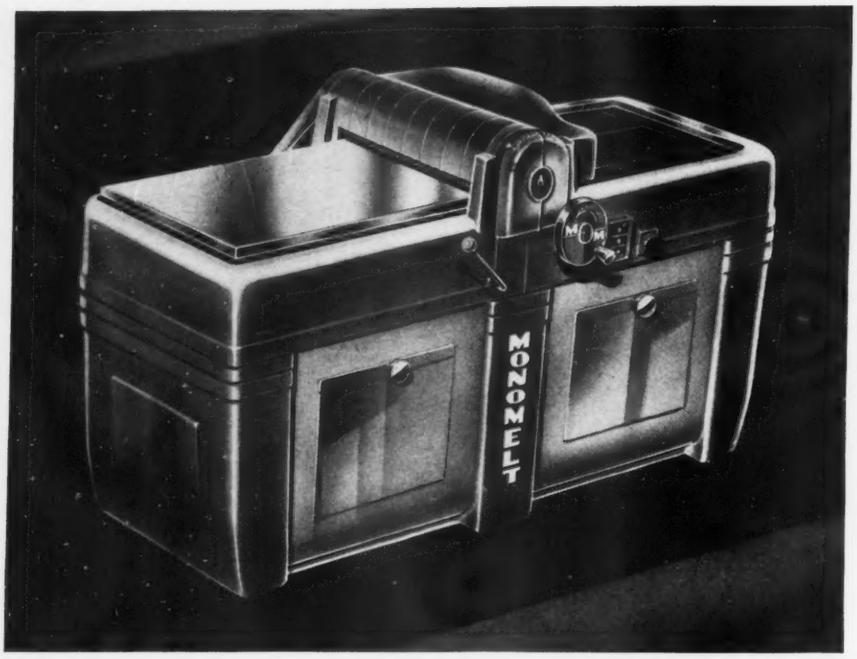
Advance planning in design and certain patented features always provide these ready possibilities.

You Can

- *add a color cylinder to any printing couple.*
- *add reversing parts to any pair of cylinders.*
- *add parts to completely reverse any unit.*
- *add a dual ink rail to any ink motion.*

The fact that this new Hoe Press has printing capabilities beyond the present needs of many publishers is their assurance of finer performance today, plus the ability to meet any future color demands likely to be made on their pressroom facilities.

HOE **R. HOE & CO., INC.**
910 East 138th Street, New York 54, N. Y.
Branches: **BOSTON • CHICAGO • BIRMINGHAM • SAN FRANCISCO**



Monomelt Heavy Duty Rotary Plate Shaver—Coincidental with the announcement made by President John W. Thompson of Monomelt's recent manufacturing alliance with General Mills, Inc., first-time peep into the details of a new rotary plate shaver were also released. The new machine is designed for the shaving of electrotypes and similar material. Mr. Thompson stated the shaver will handle material ranging from zinc plate thickness to type high plates. The shaver is equipped with flatbed table, 19 in. wide and 27 in. long, traversing on wide, precision-ground ways. He also said that micrometer controls permit rapid and positive plate shaving to a tolerance of 0.001 in.

Monomelt Arranges to Use General Mills' Facilities

THE Monomelt Company, designers of special equipment for the printing trades has arranged for the exclusive use of the manufacturing facilities of General Mills, Inc., according to a recent announcement by John W. Thompson, Monomelt president. Mr. Thompson explained that the exclusive manufacturing agreement with the Mechanical Division of General Mills includes units for making plastic mold electrotypes, improved routers for cylinder plates, heavy-duty precision plate shaving machines, and similar items.

In announcing the new alliance between Monomelt and General Mills, Inc., Mr. Thompson outlined reasons for the move. Foremost, he said, was his company's need for expanded research, technical and manufacturing facilities to assure earlier production of newly-developed Graphics Arts equipment.

"So many improvements have recently been made in existing products," he said, "and so many new items developed, such as plastic mold electrotyping systems, that interest in new equipment is particularly keen. The war has intensified this interest and many printing plants are planning to modernize their establishments now, as a means of increasing their production capacity to handle more new business profitably."

"General Mills Mechanical Division," Mr. Thompson added, "makes a logical ally for our organization because it possesses unique manufacturing skills and facilities that are suited to our specialized needs. This involves production of specially-designed high-precision heavy-duty equipment."

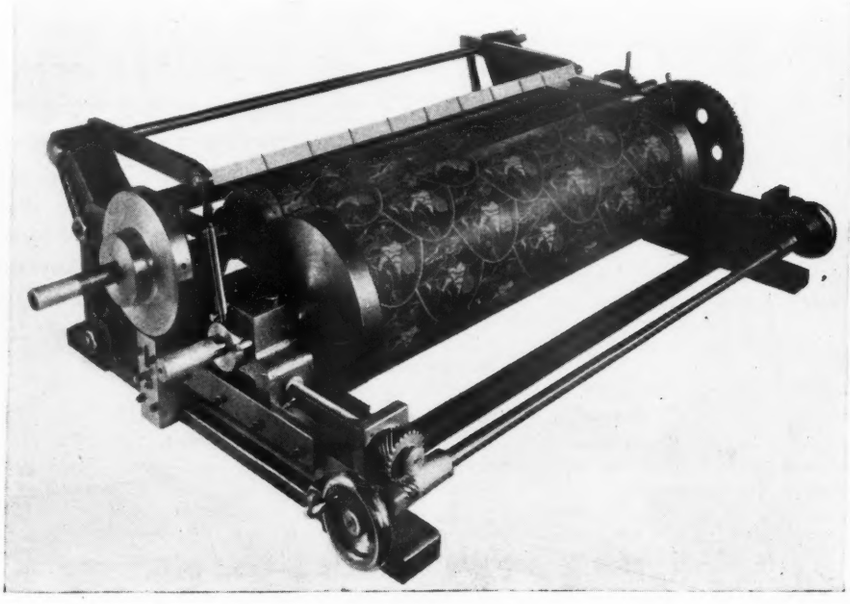
Harry McCool, who joined The Timken Roller Bearing Company in 1928 as a hot mill operator, has been appointed sales engineer for the Steel and Tube Division in Cincinnati district, which includes Indiana, Kentucky and part of Ohio, according to a recent announcement made by company officials.

Multi-Plate Mounting and Multi-Color Proving Machine

MOSSTYPE CORPORATION announces a Rubber Plate Mounting and Proving Machine. This machine was designed by Mosstype Corporation engineers, and has been in use for some time. Sponsor states it is responsible for the high degree of accuracy in mounting and registering of rubber plates and design rollers. It is now available to printing plants who wish to proof and register multi-color plates independent of printing presses, without loss of printing press time or manpower, and with great economy of ink and paper. When cylinders are prepared on this machine they are ready for immediate press operation.

In the machine is an adjustable impression cylinder. This is geared to the removable plate cylinder and shaft assemblies from any type of aniline press. Single or multiple plates to be mounted are located on plate cylinders by a dividing head which provides for exact circumferential spacing, and a straight line horizontal marker that provides for exact alignment of plates across the cylinder. Plate cylinders are then ready for proving singly or progressively on the impression cylinder. After the impression cylinder has been set for first color, the setting is not disturbed for progressive proofs.

Various types and sizes of machines are available to accommodate cylinders and shafts of all diameters and lengths. Both bench and cabinet models are under construction.

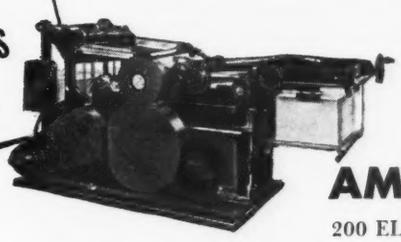


View of Mosstype Multi-Plate Mounting and Multi-Color Proving Machine for proofing and registering multi-color rubber plates independently of the printing press.

. . . quick get-away . . . complete accessibility for easy make-ready, wash-ups, or corrections . . . easily controlled distribution . . . fast and sure production . . . that's the ATF Kelly press! Run-of-the-hook or fine color work *flows smoothly* from the ATF Kelly at high press speeds. Thousands of ATF Kelly owners are agreed that any ATF Kelly is an economical press to own and operate, too.

Any ATF press can be reserved now for delivery when production is resumed. Ask the man who represents ATF about the ATF Civilian Priority Delivery Plan, or write to us direct.

ATF Kelly
The PRINTER'S
printing press



DO YOU have a "balanced" shop? **ATF Kellys and ATF Chief offset presses make an ideal team for the modern printer. Future demand will be for letterpress and offset in combination. If you are thinking about offset now, send for a copy of "Offset Answers."**

We are cooperating with the Committee for Economic Development. There are C.E.D. local committees in 2800 counties and communities. Consult the nearest one now, for help in speeding reconversion and providing maximum employment.

AMERICAN TYPE FOUNDERS
200 ELMORA AVENUE, ELIZABETH B, NEW JERSEY

Architect's conception of new plant for The Marshall-White Press, at Belmont, Kimball and Avondale Ave., Chicago. Tract of land recently purchased contains over 365,000 sq. ft. area. Architect is A. Epstein.

Marshall-White Press To Have Modern Building

ANNOUNCEMENT has been made that The Marshall-White Press, Chicago, will have a new home at Belmont, Kimball and Avondale Ave., Chicago, having a frontage on Kimball Ave. of 1030 ft. by 375 ft. deep. The company produces advertising literature and catalogs for national organizations and mail order houses throughout the country.

Included in the company's announcement is the information that the printing industry is the second largest in Chicago, and on account of Chicago's location for distribution, the Marshall-White Co. has grown consistently. It is now one of the leading lithographic and printing companies, maintaining sales offices and representatives in principal cities.

Contracts are being placed for modern equipment costing approximately $400,000. The new premises will not be larger than that occupied at the present time, but the new plant arrangement and modernization of equipment will give the company additional sales volume of at least 50%.

The land which has been purchased covers over 365,000 sq. ft. The first building unit will contain approx. 135,000 sq. ft. and will cost $700,000.

The entire building will be occupied by the I. S. Berlin Printing & Lithographing Co. and its affiliates, The Marshall-White Press and The Marshall-White Co.

Flint Expands—Buys Los Angeles Building

In December, the Howard Flint Ink Company purchased the land and buildings comprising the 6100 block on Avalon Boulevard in Los Angeles. Howard Flint recently negotiated the real estate transfer. Mr. Flint has served three terms as president of the National Association of Printing Ink Manufacturers, and is now a director of this association. He is also a trustee of the National Printing Ink Research Institute.

Building remodelling and installation of special machinery has been in progress The factory was put into full production shortly after January 1. The plant, of daylight construction and including more than 30,000 sq. ft. of floor space, represents the latest development in the expansion program of this company The new Los Angeles factory will be fully equipped to manufacture all types of inks from basic raw materials. The factory is under the direction of Leonard V. Stevens.

The plant is located on a private railroad siding.

The original plant of The Howard Flint Ink Company was established in Detroit in 1920. Since that time factories and branches have been placed in Chicago, Houston, New Orleans, Denver, Cleveland, Atlanta and Indianapolis. The establishment of the new Los Angeles factory will give the Flint Company nation-wide coverage.

"This plant," stated Mr. Flint, "is situated to serve the extensive market in the Far East. The Flint Company does a large export business, a good share of which will now be manufactured in Los Angeles."

Howard Flint, President of Howard Flint Ink Co., announces establishment of Los Angeles factory.

View of factory property purchased by Howard Flint Ink Co. in December. The property is located on a railroad siding in the 6100 block on Avalon Blvd., Los Angeles, Calif. Full ink manufacturing facilities have been installed.

New Printing Press Situation

The Miehle Printing Press & Mfg. Co. has sent a letter to the trade. The letter is to inform customers about the factors which influence delivery of new printing presses at the present time. The company quotes from a letter dated May 15, 1920 (18 months after the armistice of November 11, 1918), at which time similar conditions prevailed in the industry.

The excerpt is as follows:

> "There are many conditions existing at this time which tend to make manufacturing very difficult. The principal ones are the congestion of the railroads, the general shortage of materials, labor troubles in the plants of some of our principal suppliers and the consequent delays in the procurement of material. We are unable to obtain from our suppliers definite promises of shipping dates and in many cases they will not quote definite prices. Obviously these conditions make it impracticable for us to name shipping dates on presses, with any degree of accuracy, or to estimate manufacturing costs on presses to be built seven or eight months from now."

Conditions today are similar to those outlined in the above letter.

However, we are optimistic enough to feel sure that it will not be long before the major portion of our troubles are behind us and we can expect a steadily increasing production of printing presses in our plant.

USE MERCURY PRODUCTS

Ink control has been our business for more than a quarter century. During that time our research department has worked unceasingly to develop rollers and blankets that control and distribute ink with maximum efficiency. The Mercury Roller and Blanket is the climax of this effort.

When you buy these accessories, you benefit from the experience of a firm which has *pioneered* in the development of modern printing and lithography. You will find that Mercury accessories are amazingly durable, accurate to the "Nth degree", as perfect as any man-made precision product can be. Put them to work for you.

D. M. Rapport
President

RAPID ROLLER CO.

Federal at 26th
• Chicago, Illinois

Printed Radio provided for at Station WGHF, New York—Tip of antenna about 700 ft. above sea level—Illustrated newspapers, magazines and bulletins will be sent into homes

AN antenna for a new kind of post-war broadcasting station, (FM and FAX) may now be seen from the sidewalks of New York, N. Y., in the Grand Central Station area. At Station WGHF, Capt. W. G. H. Finch has erected on top of one of the city's highest buildings an antenna that resembles a giant skyrocket. Actually, the antenna is simply part of the equipment that has been built for static-free broadcasting of sound and facsimile.

The sound will be the FM (frequency-modulation) radio. Facsimile is a little more complicated to describe because

View of Finch FM-FAX Station WGHF antenna erected on top of building in New York. It is expected to broadcast printed radio from this station in addition to FM programs.

nothing quite like it has been seen by most people. Facsimile is currently described as printed radio, or radioed publishing—newspapers, magazines, books, illustrated bulletins and news sent with pictures into homes. Before the war, facsimile was broadcast on AM (amplitude-modulation) far across the ocean. But as newer FM reaches only to the horizon, the programs soon to be broadcast by the Finch station on 99.7 megacycles, are expected to be limited to about 6840 square miles of territory, or a radius of 50 miles from the vicinity of the New York Public Library. Other cities and territories will be served by other FM and facsimile stations.

"In time," said Captain Finch recently, "we confidently expect a great mass circulation for facsimile broadcasting. The printer is attached to the present radio receiver; then, on receipt of a 'fax' signal, the roll of electro-sensitized paper in the printer begins to turn, and out comes the printed matter as fast as our station puts it on the air. Illustrated news, with details of market reports, pages of photos, cartoons, women's pages, columnists' contributions, book reviews, crossword puzzles, boxscores — everything that combined radio and printed matter can give will come by facsimile over WGHF."

The top part of 10 East 40th Street is being converted into the studios and offices of this new radio station. The antenna above has been specially designed by Dr. Andrew Alford, who is past-chairman of the Antenna Committee of the Institute of Radio Engineers. The tip of the mast is about 700 ft. above sea level. Asked to describe the antenna and its operation in "words that any layman could readily understand," Dr. Alford drew from his pocket a prepared statement which follows:

"The high frequency of the new FM band together with the horizontal polarization have made it possible to achieve something new in Broadcasting: a single unit antenna which has gain over a half wave. This gain is obtained by using a bent metal sheet along which the wave length is longer than the wave length in space so that the radiation comes from a long vertical column. This fact results in a concentration of radiation toward the horizon where it is desired with less power being sent to the sky and into the area immediately adjacent to the station where the signal is always more than sufficient. The WGHF antenna radiates nearly equally in all directions of the compass. The input impedance of the antenna is relatively low so that the insulation is not subjected to high voltages. Only one seal insulator is used and protected from the weather."

New Laboratory at Whiting, Ind.

Max Robbins, General Manager of Federated Metals Division, American Smelting and Refining Company, announced the opening of a new $100,000 physical testing laboratory at the Company's Whiting, Ind. plant. The laboratory is completely equipped with the latest developments in metallurgical equipment, including physical testing apparatus and spectrographic equipment. This new laboratory will be devoted to the solution of customer problems of a routine, research, or production nature, and will be under the supervision of Don Graves.

Informative Bulletin

Probably one of the most graphic bulletins ever to have been published about electrotypes and stereo mats for newspapers, is the one sponsored by The Rapid Electrotype Co. The bulletin is published for better production of national newspaper ads. It consists of 8 illustrated pages printed in red, yellow, blue and black ink. On a four-page inside spread are illustrated the three steps involved when electrotypes are released to national newspapers, and the five steps involved when stereo mats are released for the same purpose. Two of the pages are devoted to technical discussion of the requirements of type matter and photoengraving for best reproduction results in plate form. The back page is devoted to an explanation showing why the original material used in national advertisements should be prepared specifically for newspaper reproduction and printing processes.

ANPA Mechanical Conference

The ANPA Mechanical Conference will be held August 5, 6 and 7, 1946 at the William Penn Hotel, Pittsburgh, Pa. The entire convention floor of the hotel has been set aside. Arrangements have been made with the William Penn and five other hotels in Pittsburgh to provide enough sleeping rooms for those attending the conference

Originally planned for Chicago in June, it was found that Chicago hotels are so congested that the time and place for the Mechanical Conference was changed to August in Pittsburgh.

United Air Freight

The photo-engraving and printing industry will be interested in plans announced by United Air Lines for inauguration of air freight service over its coast-to-coast and Pacific Coast system effective February 1. United's air freight tariff, filed with the CAB on January 2, shows rates as low as 27c a pound on shipments of 3000 lbs. from coast to coast. Typical examples of the new tariffs are: 25 lbs. from New York to the Pacific Coast, $8.78; 100 lbs, $33.63; 25 lbs. from Chicago to Los Angeles, $6.46; for 100 lbs., $24.35. The tariff is based on minimum shipments of 25 lbs.

According to C. P. Graddick, the company's director of air cargo, charges are graduated according to volume and distance shipped so as to give the lowest possible rates to volume shippers for long distance hauls.

An Invitation

The editor of *Printing Equipment Engineer* invites mechanical and production executives to submit informal descriptions and pictures of production and mechanical helps devised in their plants for publication in this magazine. Perhaps these ideas will help other executives.

Patents

For The Graphic Arts Field

The patents reported here are those issued on November 20, November 27, December 4, December 11.

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issuing each week, Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here, specify the patent numbers and send 10c for each separate patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Binding, Cutting, Perforating:

2,389,699. APPARATUS FOR BINDING CALENDARS, DISPLAY CARDS, AND MAPS WITH A METAL STRIP and attaching metal eyelets for hanging the article from a wall hook. Strips are fed transversely of their length beneath a pressure plate in overlapping relation with respect to the eyelets. The mechanism for holding and moving the strips cooperates with a pair of gauges positioned at the ends of the strips. Each gauge comprises a finger adjustably held against the working surface, such finger having a beveled side edge beneath which the end of each successive strip is moved. A resilient link provides the support for the finger which is attached at one end of link and link is adjustably clamped to a stationary support adjacent its other end. Invented by William Stuebing, Jr., Cincinnati, Ohio. Unassigned. Application January 5, 1942. 1 claim.

2,390,276. CONVEYER STRUCTURE for a machine which applies glue to the back edges of books that are still in the form of sections that have been sewn together. Books are carried through the machine in groups, the books standing on edge and side by side. Each group of books is moved ahead by a rod or bar spanning the distance between a pair of endless chains and contacting the rear edges of the books. This invention provides the transverse bars or rods with forwardly projecting parts, in spaced relation to each other. Some of the books in each group register with these parts and are driven ahead by them, while the remainder are located between the projecting parts and are engaged by the bar as in the old machine. This causes some of the books in each group to be offset lengthwise with respect to the books in that group and gives the group a toothed configuration at both the leading and the trailing ends so that an operator can easily take hold of the ends of the individual books instead of being required to hunt the planes of operation between the books. Invented by Henry Sieb, Hammond, Ind. Unassigned. Application September 20, 1944. 4 claims.

2,390,901. METHOD OF OPENING BOOK SIGNATURES that have folded body leaves and end leaves by mutilating the end leaves or cutting away or perforating them at their edges near outside of trim lines of signatures. End and signature leaves inside the mutilations are then subjected to suction by a suction mechanism. The method is adapted for use with signature feeding machines of the type covered by patents 2,025,527 and 2,124,862. The signature is fed to a rotating cylinder and, by it, carried around with its folded back edge in advance, until it hangs vertically. When in this position, suction cups swing upward and inward from opposite sides and grasp the end leaves near the unfolded lower or front book edge, and then swing downward and outward so as to draw the signature from the cylinder and pull it open. When opened, the suction of the cups on the end leaves is released and the signature is allowed to drop onto the support or saddle. In this procedure the signature sometimes failed to open and the present improvement of perforating is designed to overcome this fault. Invented by Carl Schramm, North Coventry, Conn. Assigned to Smyth Manufacturing Company, Hartford, Conn. Application March 13, 1944. 7 claims.

Composing Room Equipment:

2,390,054. STEREOTYPE MAT-CASTING DEVICE which comprises a body or "stick" that engages with a table opening of a type-casting machine, such as a Ludlow type, and a lock-up slide that is moveable lengthwise in a matrix receiving channel of the body. The channel is approximately the same length as the slide and opens only at one end. The slide seats against a matrix in the channel and has a casting opening or slot registering with the matrix. A normally fixed but releasable cross-slide engages in holding relation across one end of the lock-up slide at the open end of the channel. Lock-up slide projects beyond the corresponding face of body and is arranged for inward movement upon engagement by a moveable mold of the machine so as to urge the slide into positive lock-up relation with the matrix. Invented by Lawren E. Broyles and Everett J. Pittenger, Chico, Calif. Unassigned. Application July 7, 1944. 10 claims.

2,390,967. GRINDING MACHINE (observe company to whom patent is assigned) in which an operator, after having set the grinding elements and having determined on a graduated adjustment handwheel the desired height of the grinding wheel in relation to the finished size of the work, will be freed of further adjustments. The machine continuously grinds, in successive operations for production purposes, quantities of identical or similar parts to thicknesses varying less than one-thousandth of an inch. Work does not have to be removed from the machine and measured before the final grinding operation. Invented by Frank Swenson and Erik Iver Erikson, Weatherly, Pa. Assigned to Linotype Parts Company, Weatherly, Pa. Application January 5, 1942. 8 claims.

Feeding, Folding and Delivery:

2,389,480. STREAM-TYPE FEEDER in which sheets are advanced in lapped relation from a supply to a printing press. A pair of suction devices is arranged above a stack of sheets and is mounted for movement toward and away from supply to grip the topmost sheet at transversely spaced points and lift sheet from the stack. The suction devices move laterally away from each other while gripping the sheet, thereby stretching it. The stretching of the sheet straightens the sheet and raises its entire rear edge for engagement by sheet forwarding devices and, when transferred to the forwarding devices, assures that sheets will be in proper lateral position for accurate presentation to a conveyer. Extent of lateral movement of suction devices may be controlled independently of each other. Invented by Leonard Baker, Hillsdale, N. J. Assigned to Dexter Folder Co., Pearl River, N. Y. Application August 12, 1944. 15 claims.

2,389,586. DRYING APPARATUS that adds an improvement to that shown in patent 2,071,015, issued in 1937. The drying apparatus uses circulated air currents and is very effective in drying cloth or other material in web form. Two parallel walls, forming between them a drying space through which the cloth or other web material is fed, are each provided with nozzle elements adapted to project high pressure jets of heated air or other gaseous drying medium against the web material at right angles thereto, thereby creating cyclonic circulating air currents which are carried across the face of the web material. Present invention provides a novel means for projecting radiant heat against the cloth while it is subjected to the

Finish Line...
HOW DID YOU GET IN ON THIS PARTY? I CAN SERVE ALL THE ENGRAVERS MYSELF.
LISTEN, BUD, WHEN THE'RE TOUGH JOBS TO BE DONE, THE BOYS NEED ME AND YOU KNOW IT.
ALL RIGHT, WITH MY SMOOTH PERFORMANCE AND YOUR RUGGEDNESS, WE MAKE A PERFECT COMBINATION...
... AND WE WILL BE TOGETHER IN A FINISH* THAT'S TOPS.
ZOMO ZINC
A-Z ALLOY
*Of course, he means the machine Cut Finish . . . exclusive with Zomo Electric Zinc and A-Z Alloy.

Conference Dates

ANPA Mechanical Conference—William Penn Hotel, Pittsburgh, August 5, 6 and 7, 1946. Worth Coutney, Chairman; Walter E. Wines, Manager, ANPA Mechanical Dept., 370 Lexington Ave., New York 17, N. Y.

International Association of Printing House Craftsmen—Convention in 1946 to be held in Montreal, Canada. Dates to be announced later. H. Guy Bradley, President, 5480 N. Illinois St., Indianapolis 8, Ind.; Herbert Threlfall, Seretary, 55 Pine St., Providence 3, R. I.

Northwest Mechanical Conference—Hotel St. Paul, St. Paul, Minn., Feb. 16, 17, 18, 1946. Al Rosene, President, c/o *Dispatch* and *Pioneer Press;* Vernon Eck, Secretary, 3725 48th Ave. S., Minneapolis 6, Minn.

SNPA (Eastern Div.) Mechanical Conference—Conference to be held in New Orleans, La., during early part of September, 1946. Exact dates to be announced later. C. Frank Mann, Chairman of the Mechanical Committee, c/o *Courier-Journal* and *Times,* Louisville, Ky.; Walter C. Johnson, Manager SNPA, P. O. Box 1569, Chattanooga 1, Tenn.

New England Mechanical Conference—1946 conference dates to be announced later. George L. Green, President, Providence (R.I.) *Journal;* Walter C. Crighton, Secretary-Treasurer, New London (Conn.) *Day.*

PNPA Newspaper Mechanical Conference—Fort Stanwix Hotel, Johnstown, Pa., Monday and Tuesday, April 1 and 2. L. W. Barnes, Bus. Mgr., Johnstown (Pa.) *Tribune* and *Democrat,* Chairman of the Mechanical Committee. Wm. N. Hardy, Mgr., Pennsylvania Newspaper Publishers' Assoc., 209 Telegraph Bldg., Harrisburg, Pa.

Illinois Newspaper Mechanical Conference—1946 conference to be held in Waukegan, Ill., during the fall. Dates to be announced later. President, Clarence R. Snethen, Superintendent, Waukegan (Ill.) *News-Sun;* Secretary-Treasurer, Howard Colton, Pressroom Foreman, Bloomington (Ill.) *Pantagraph.*

LNA Convention—Marlborough-Blenheim Hotel, Atlantic City, N. J., during week of May 12 to 18, exact dates to be announced later. W. Floyd Maxwell, Secretary, 420 Lexington Ave., New York 17, N. Y.

Great Lakes Mechanical Conference—1946 Conference to be held in Indianapolis, Ind., October 27, 28 and 29. George Fuller, President, Stereotype Supt., Cleveland *Press;* Al Oberg, Secretary, Comp. Room Supt., Flint (Mich.) *Journal.*

action of the air jets. The radiant heat raises the temperature of the web material, facilitating the evaporation of moisture therefrom, and, together with the circulating air currents, produces a more effective drying apparatus. Invented by Bernard R. Andrews, Braintree, Mass. Unassigned. Application November 17, 1944. 3 claims.

2,389,848. PAPER HANDLING MECHANISM more especially for a duplicating machine having a drum at the lower portion of which copy sheets are released as the drum rotates. An endless belt conveyor receives the sheets from the drum. Conveyor is moved at substantially the same surface speed as that of the drum for carrying sheets forwardly and upwardly. A tray that is pivoted on a transversely positioned axis at front end of conveyor receives the sheets from the conveyor. The tray may be shifted to a number of different angular positions by a polygonal member which pivots from a portion of the framework and is arranged to be held normally in automatically adjusted position by the pressure of the tray itself. Invented by James L. Gibson, Chicago, and Eric W. Peterson, Glen Ellyn, Ill. Assigned to Ditto, Incorporated, Chicago, Ill. Application December 18, 1941. 2 claims.

2,389,854. SHEET HANDLING METHOD by which a cylinder press, such as a Miehle vertically moving bed cylinder type press, can crimp together a sheet to be printed upon and one or more underlying sheets, such as carbon paper, as the sheets are advanced by the cylinder to printing position. A set of crimping dies is carried on the gripper bar of the impression cylinder and a corresponding set of dies are locked into the chase of the press. The sheets are releasably fastened together and the subject matter may be printed on one side of the master sheet directly by the press. The subject matter is simultaneously imprinted in reverse on the opposite side of the master sheet by means of the carbon. Thereby the master sheet may be used in a direct process "Ditto" duplicating operation to make subsequent copies of matter imprinted on it. Invented by Arthur L. Hess, Cincinnati, Ohio. Assigned to Ditto, Incorporated, Chicago, Ill. Application September 25, 1942. 2 claims.

2,389,891. CONTROLLED FEEDING METHOD in which cooperating printing cylinders and means defining a feed path along which separate sheets are fed to printing cylinders are provided. Sheets are normally fed at a speed commensurate with the operating speed of the printing cylinders. An area in the feed path is of about the same length as the longest sheet to be fed. A yieldable detector, normally located in the feed path at each terminal of the area, moves from the feed path to actuate an interrupter mechanism when a sheet engages with the detector at an improper time during the movement of sheet along feed path toward printing cylinders. The interrupter mechanism controls the printing operation of the machine. Invented by Edgar L. Budden, Richmond Hill, and William C. Wieking, Woodhaven, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application September 16, 1941. 18 claims.

2,389,929. WEB FEEDING MECHANISM for flat-bed printing presses for printing webs. Better register is said to be obtained. The feed mechanism intermittently advances the web. A single continuously rotating mechanism and a pair of rigid spaced-apart links are included. Each link is directly connected at one end with the web advancing means and is also operatively connected at the other end with the rotating mechanism in a single coacting unit. A slower movement is given to the web advancing means during both the beginning and the end of each operating cycle of the rotating mechanism. Invented by Christian Paulsen, Fair Lawn, N. J. Assigned to New Era Manufacturing Company, Paterson, N. J. Application August 13, 1943. 13 claims.

REISSUE 22,702 of 2,280,799. PRINTING PRESS FEED in which a bite is formed between the rolls and a chain registration-delivery includes sprockets rigidly mounted with respect to one of the rolls and rotating with it. A pair of chains extend around the sprockets, each having a length corresponding to a number of revolutions of sprockets and a number of gripping units carried by the chains and cooperating with rolls to deliver sheets to the bite for separate printings by the rolls. A sheet may be fed to each gripping unit while it is supported on the sprockets and it is registered relative to printing rolls independently of the exact location of gripping unit relative to printing rolls. The registered sheet is gripped so that successive printings of the same sheet by the rolls are made with perfect registration regardless of which gripping unit carries the sheet through the bite and its precise location relative to the printing rolls. Invented by William Ward Davidson, Evanston, Ill. Assigned to Davidson Manufacturing Corporation, Chicago, Ill. Application for original patent October 3, 1939. Application for reissue January 29, 1944. 21 claims.

2,390,827. SHEET SEPARATORS used in conjunction with pneumatic means on a printing press for picking up single sheets of stock. One separator is mounted on each side of the stock. Each separator includes a mounting bracket, a pivoted rocker on the bracket, and a clamping finger on the rocker. A spring acts upon the rocker to cause the finger to clamp down the top sheet. A mechanism, mounted in the path of the separator frame, is actuated to tilt the rocker and swing the finger away from the stock against tension of a spring to allow removal of the top sheet. The spring in turn causes the finger to flip against the edge of stock being lifted for separation of any sheets sticking to top sheet. Invented by Benjamin W. Dalton, Detroit, Mich. Unassigned. Application August 9, 1944. 3 claims.

Miscellaneous:

2,390,460. PRINTING INK KNEADING UNIT, which may also be used for preparing bread dough, linoleum, asbestos, and paint. An operating shaft is rotatable within a container, and a kneading member has a plurality of radially opposed pairs of segments, the segments of each pair being oppositely inclined and in radial relation to the shaft. There is a continuous dividing wall between the segments and concentric to the shaft, and stationary baffles are disposed radially to the shaft. Stationary ring sections, pivotally supported on the stationary baffles, are in vertical alignment with the wall of the kneading unit. A stuffing box at the bearing of the main shaft at its lower end prevents abrasive materials from entering and injuring the bearing. Invented by Eric A. F. Presser, East Chicago, Ind. Unassigned. Application January 21, 1944. 4 claims.

Plate Making:

2,390,497. LITHOGRAPHIC PLATE MAKING APPARATUS. Plates are processed from developed film within a compact cabinet housing especially designed to conserve floor space in ships or mobile battle equipment. The developing apparatus is disposed within a dark room portion and the metal plate processing apparatus is outside the dark room portion but connected to it by communicating means whereby the developed film may be transferred for further processing outside of the dark room. A vertically disposed blanket frame is mounted on hinges and nested within the housing and is adapted to be pivoted outwardly, while a glass frame nested within the housing is hinged on the blanket frame to tilt with it. A conduit connects a vacuum producing source in the housing with the top surface of the blanket frame next to the glass frame. A translucent opaquing table that is held horizontally and slidably within the housing is adapted to tilt downwardly at an angle when withdrawn. The blanket frame tilts outwardly at an angle independent of the glass frame to form a rest for the outer end of the opaquing table. Invented by James T. Campbell, Detroit, Mich. Unassigned. Application December 31, 1942. 2 claims.

2,390,944. MAKING OF POSITIVE REVERSAL AND DEEP-ETCH LITHOGRAPHIC PLATES. The etched surfaces, after the etching solution has been removed, are treated with an ink-receptive lacquer containing an anhydrous solvent which is capable of forming, with water, a minimum boiling point mixture. The lacquer is thereby endowed with the function, first, of exerting a drying effect upon the surface to which it is deposited, and then protecting that surface upon evaporation of the solvent-water mixture. This "dehydrating" lacquer is said to facilitate consistently satisfactory results under all weather conditions, whether the plates have been subjected to an alcoholic or cold water wash for removal of the deep-etching solution, or to a hot water wash for removal of both the etching solution and the resist. A representative composition consists of a suitable film forming resin and anhydrous isopropyl alcohol as the lacquer solvent. Invented by Charles F. King, Cincinnati, Ohio. Assigned to The Lithographic Technical Foundation, Inc., New York, N. Y. Application February 11, 1944. 7 claims.

DESIGN 143,129. ORNAMENTAL DESIGN FOR A PLATE WHIRLER. The patent illustrates the cabinet for the whirler which consists of a three legged circular table. The circular top of the table is a shallow tank completely enclosed by a cover. Approximately one-third of the cover is attached whereas the other two-thirds is a separate hinged piece that may be lifted by a handle. To aid the latter in being lifted, two heavy counter-balancing springs are provided, one at each side. Between the three legs of the table, just above floor level, there is a horizontal shelf carrying an electric motor and appropriate pulleys and pulley wheels for driving a vertical shaft which extends up into the bottom of the shallow tank to spin the plate support within the tank. Invented by James T. Campbell, Detroit, Mich. Unassigned. Application March 22, 1944.

Printing Inks and Related Chemicals:

2,389,245. PRINTING PASTE FOR CELLULOSIC FABRICS comprises an alkali metal salt of a sulfuric acid ester of a leuco-vat-dyestuff, an oxidizing agent, an agent capable of splitting off the acid, a catalyst, and a volatile organic base that is stable towards the oxidizing agent in the absence of an inorganic acid. This paste allows the production of deeper and fuller shades on the textiles by a short steaming process. An example of the paste formula is: Indigosol Green IB, 80 parts; Dehagen 0, 100 parts; hot water, 210 parts; neutral starch tragacanth thickening, 500 parts; sodium chlorate solution of 25%, 50 parts; ammonium vanadate solution of 1%, 10 parts; diethyltartrate, 40 parts; diethylenetriamine, 10 parts. Invented by Alexis Wiazmitinow, Basel, Switzerland. Assigned to Sandoz A. G., Fribourg, Switzerland. Application October 28, 1941. 8 claims.

2,389,371. STEAM-SETTING INKS capable of satisfactorily printing half-tone illustrations. Ink comprises a suspension of pigment in a vehicle consisting of a resin dissolved in a liquid polyglycol and a proportion of a liquid selected from the class consisting of pine oil and a monoterpinylethylene glycol ether, effective to prevent "fill-in" in half-tone plates but insufficient to interfere with the speed of steam-drying of the ink. The addition of the pine oil is responsible for the improvement. Invented by John W. Kroeger, Drexel Hill Plaza, and Daniel J. O'Connor, Jr., Yeadon, Pa. Assigned to Fred'k H. Levey Co., Inc., New York, N. Y. Application July 26, 1944. 6 claims.

2,389,682. DECORATIVE OR PROTECTIVE FILMS for paper, leather, etc., which are ketone-urea formaldehyde condensation products. A mixture of 1 part of dimethylol

New! IMPROVED ASSEMBLER SLIDE BRAKE OPERATING LEVER

Part No. D1463A
(Replaces D1463 or D3214)

In time, wear occurs on the Assembling Elevator casting and the Brake Operating Lever, where the two contact. This results in incomplete stroke of the lever. The Brake Shoes drag on Assembler Slide, making Slide's return sluggish, and wearing it prematurely.

By addition of extra stock here, we compensate for wear on the Assembling Elevator casting. **The Assembler Slide wear is reduced. By not having to wait for the Slide's return, the operator's time is saved and his nerve tension eased. Like all worthwhile changes, this one is simple but effective.**

Price $1.40

BACK AGAIN!

THE

Keyboard Cam Oiler

For Distributors too, and any place requiring a drop of oil or less. Filled with clock oil.

PART NO. Z-43—85c

A drive is no stronger than it's weakest link—Specify ACE BELTS.

PRECISION TRADE ★ MARK

LINOTYPE PARTS COMPANY

Factory and Main Office:
WEATHERLY, PA.
Branch Office: 314 WEST 10th STREET, KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER

again . . . .

AVAILABLE!

CHALLENGE

SEMI-STEEL

IMPOSING SURFACES

PRECISION GROUND

Is that GOOD NEWS!

Yes, we are back into production for civilian needs. However, the backlog of orders is such that we recommend you place your order at once for future delivery, as orders are being filled in the same rotation as received.

Right now is the time to replace those old-fashioned imposing stones with these *precision ground, rigid, true working surfaces of semi-steel.* They will speed up work and reduce lock-up time.

Challenge Semi-Steel Imposing Surfaces are two inches thick with heavy reinforcing ribs at right angles to prevent sag. The tops are precision ground to a high degree of accuracy and will maintain that accuracy when properly supported. Furnished with or without rabbet for standard galleys.

Built in 18 standard sizes and in special sizes on order.

OTHER CHALLENGE COMPOSING ROOM EQUIPMENT

Steel Galleys — Galley Cabinets — Plate-Mounting Equipment — Stereo Bases — Hi-Speed Quions — Labor-Saving Iron Furniture — Mammoth Iron Furniture and Proof Presses. Write for data today!

Buy and Keep Victory Bonds!

Challenge 550

THE CHALLENGE MACHINERY COMPANY

GRAND HAVEN, MICHIGAN

metal handling costs with the MONOMELT system

By eliminating the old furnace method of melting and pigging type metal the MONOMELT system—

- Reduces costs by moving type directly from kill-out to type casting machine.
- Reduces dross loss 50% to 75%—less frequent toning of metal is necessary.
- Cuts "down" time due to metal troubles—you get more productive hours per machine.
- Because metal is kept in better balance the casting temperature can be reduced 35° to 50° assuring high quality slugs that mean easier proofing, better mats, finer press work.

HERE IS HOW ONE NEWSPAPER SAVED MONEY AND TIME WITH THE MONOMELT SYSTEM

One newspaper using 17 typecasting machines threw out their obsolete furnace, saved $1,273.68 per year in metal and handling costs alone with the MONOMELT system. They made a further saving because the efficiency of each typecasting machine was increased 10% to 25%.

Investigate MONOMELT system of type metal handling and see how it will save you money and time while improving your typecasting. *Write today for detailed report of savings made with* MONOMELT *in a typical newspaper plant.*

MONOMELT DROSS SIFTER

- Keep your type metal cleaner with the MONOMELT Dross Sifter. Fits tightly in the end of standard dross drum, vanes in top spread dross evenly over screen for rapid, efficient sifting. Cleaner metal reduces machine troubles, improves quality of slugs. Mail your order today. Price $25.00 f.o.b. Minneapolis.

MONOMELT COMPANY 1611 POLK STREET NORTHEAST MINNEAPOLIS 13, MINNESOTA

urea is condensed with between 0.1 and 8 parts of methylol ketone in the presence of an acidic catalyst, such as benzoic acid, and a lower aliphatic monohydric alcohol which is present in excess of the theoretical chemical equivalent of the methylol groups with which the monohydric alcohol reacts. The methylol ketone used in the process comprises the reaction product of 1 mol of formaldehyde with between 1 and 0.5 mols of a mono-ketone selected from the group consisting of methyl-alkyl ketone in which the alkyl radical contains less than 6 carbon atoms and cyclohexanone. Invented by Walter Nebel, Parlin, N. J. Assigned to E. I. du Pont de Nemours & Company, Wilmington, Del. Application October 17, 1940. 9 claims.

2,389,781. LUMINESCENT COATING MATERIAL comprising a sulfide pigment of the type usually affected by sunlight and moisture. This is improved by adding a binder which is a partial ester of a mono-carboxylic acid containing at least 6 carbon atoms, such as ricinoleic acid, combined with a polyhydroxy substance such as glycerin. The partial ester freely functions to retard the adverse effect of moisture and light on the luminescent pigment and the useful life of the luminescent paint is prolonged as much as 125 times. The paint has been found very effective when applied by the silk-screening method, and may also be used as an ink, when so adapted. Invented by Sampson Isenberg, Chicago, Ill. Assigned to General Luminescent Corporation, Chicago, Ill. Application June 22, 1942. 15 claims.

2,390,102. TYPOGRAPHIC PRINTING INK characterised by its good resistance to humidity during the printing operation yet which sets rapidly upon being sprayed with steam or water. A typical example of black ink is, with parts by weight: lamp black, 2.6%; carbon black, 10.1%; petrolatum, 3.5%; dipropylene glycol, 28.9%; vinsol, 25.9%; diethylene glycol, 21.9%; iron black, 3.0%; methyl violet, 1.3%; and talc, 2.8%. Invented by Francis J. Jeuck, Chicago, and Charles A. Rietz, Park Ridge, Ill. Assigned to Interchemical Corporation, New York, N. Y. Application January 28, 1944. 3 claims.

2,390,123. HIGHER SPEED TYPOGRAPHIC PRINTING INKS of the binder-solvent type are made possible by dispersing the ink in a terpene phenol resin dissolved in a petroleum hydrocarbon solvent which is non-volatile at ordinary room temperatures but which evaporates rapidly when heated to temperatures around 240° F. The carrier has a small percentage (½ to 6%) of an ethyl cellulose film-forming agent colloidally distributed throughout. The agent is largely insoluble in the solvent and resin solution at ordinary temperatures, but becomes more soluble as the solvent is lost and the resin concentration increases. Thereby the coating of ink is aided in drying by the film-forming agent. Invented by Charles A. Rietz, Park Ridge, and Francis J. Jeuck, Chicago, Ill. Assigned to Interchemical Corporation, New York, N. Y. Application July 22, 1942. 11 claims.

2,390,153. BINDING AGENTS USEFUL IN PRINTING, coating, or impregnating paper. Starting materials are insoluble in water and in organic solvents. They are nitrogenous condensation products of aliphatic diamines having at least 5 carbon atoms and carbonyl compounds selected from the group consisting of aldehydes and ketones. By this invention, these condensation products are heated with three times their weights of 30% aqueous formaldehyde until they are made soluble in water and organic solvents. Invented by Rudolf Kern, Ludwigshafen-on-the-Rhine, Germany. Vested in the Alien Property Custodian. Application May 29, 1941. 6 claims.

2,390,164. RESINOUS PRODUCT obtained by conjointly polymerizing 50 to 99 parts of vinyl chloride and 1 to 50 parts of an ester of allyl alcohol and a saturated monocarboxylic acid. Solutions of the resins in a clear state or admixed with pigments may be used for coating paper, fabrics, wood, and metal. Moistureproofing agents may also be added. The softer of the resins may be used as adhesives, particularly in applications where color retention and permanent thermoplasticity are required. Invented by Eugene W. Moffett, Milwaukee, Wis., and Roy E. Smith, New York, N. Y. Assigned to Pittsburgh Plate Glass Company, Pittsburgh, Pa. Original application April 5, 1940; divided and this application May 5, 1943. 3 claims.

2,390,202. SYNTHETIC DRYING OILS for use in the manufacture of printing and lithographic ink, etc. The drying oils are esters of unsaturated monocarboxylic higher fatty acids such as linoleic, oleic, etc., and polypentaerythritols. They are prepared by heating together the fatty acid and the polypentaerythritol either alone or in the presence of one of the following: (a) an inert gas such as carbon dioxide, (b) an esterification catalyst such as lead oxide or sulfuric acid, (c) an inert solvent. Invented by Harry Burrell, Paramus, N. J., and Philip I. Bowman, Syracuse, N. Y. Assigned by mesne assignments to Heyden Chemical Corporation, New York, N. Y. Application January 31, 1941. 12 claims.

2,390,326. COMPOSITION FOR COATING and other purposes. Allyl and substituted allyl methacrylates can be used with unsaturated monomers to prepare interpolymers of any desired degree of cross-linkage, hardness, and insolubility. When polymer is prepared on surface of paper, various proportions of ethyl acetate or other low boiling diluent can be added. Process comprises reacting allyl alcohol with alpha-hydroxy-isobutyric acid, thus forming allyl alpha-hydroxy-isobutyrate and water. Water is separated, and allyl alpha-hydroxy-isobutyrate is reacted with an acetylating agent to form allyl alpha-acetoxy-isobutyrate, which is pyrolyzed at 400° to 600° C., forming allyl methacrylate. Invented by Chessie E. Rehberg, Philadelphia, and Charles H. Fisher, Abington, Pa. Assigned to Claude R. Wickard, as Secretary of Agriculture of the United States of America, and his successors in office. Application February 4, 1943. 11 claims.

2,390,327. COMPOSITION FOR COATING and other purposes. Allyl acrylate is prepared by reacting allyl alcohol with lactic acid, thus forming allyl lactate and water. Water is separated, and the allyl lactate is reacted with an acetylating agent to form allyl alpha-acetoxypropionate, which is pyrolyzed at a temperature of 400° to 600° C., whereby allyl acrylate is formed and then recovered. As in the composition of the preceding patent, if the polymer is prepared on surface of paper, various proportions of ethyl acetate or other low boiling diluent can be added. Invented by Chessie E. Rehberg, Philadelphia, and Charles H. Fisher, Abington, Pa. Assigned to Claude R. Wickard, as Secretary of Agriculture of the United States of America, and his successors in office. Application February 4, 1943. 6 claims.

2,390,390. IMPROVED HEAT DRYING INK permits increased speeds in the printing process and at low cost. New ink comprises pigment dispersed in a vehicle consisting of resin dissolved in a solvent which is non-volatile at ordinary room temperatures but which evaporates rapidly when heated to elevated temperatures of about 240° F. Distributed in colloidal form through the vehicle, there is a small percentage (from 0.5 to 6%) of a thermoplastic film-forming agent insoluble in the solvent and vehicle both at room temperatures and at elevated temperatures. The thermoplastic film-forming agents may be cellulose ethers or cellulose esters of natural or synthetic resins, or prolamines such as zein, which will not melt completely on heating to drying heat. Films containing them are less sticky than those formed without the agent. Invented by Charles A. Rietz, Park Ridge, and Francis J. Jeuck, Chicago, Ill. Assigned to Interchemical Corporation, New York, N. Y. Application July 21, 1942. 8 claims.

Printing Presses and Equipment:

2,389,560. APPARATUS FOR MAKING JOINTS in strips of thermoplastic material of the type used for endless die wiping belts for removing surplus ink from intaglio printing plates or dies. A smooth joint is made so that it is of the same thickness as the remainder of strip or belt. Apparatus has a pair of clamps, each of which grips an end portion of the strip, and supported for relative movement to bring one end of strip into edge-to-edge contact with the other end. Each clamp comprises a pair of jaws having parallel flat clamping surfaces adapted to contact opposite surfaces of one of the strips, the inner ends of the jaws having a shearing edge at clamping surfaces. Beyond the shearing edge, space is provided to receive surplus sheared material. Invented by Robert N. Steffens, New

York, N. Y. Unassigned. Original application March 26, 1942. Divided and this application November 2, 1943. 3 claims.

2,390,156. PLATEN MOUNTING for a press of the Gordon type which, while retaining the conventional impression screws per se, combines auxiliary screws through which the platen is connected with the impression screws so that the platen may be advanced or retracted at its different corner portions selectively and to the extent desired relative to its coacting element. A number of compound screws having differential motion anchor the platen on the rest, and a center screw is interposed between platen and rest. Gearing, which includes a ring-gear encircling the center screw, turns the compound screws simultaneously either to advance or retract the platen equally at all portions. Invented by Eneval Kluge, St. Paul, Minn. Assigned to Brandtjen & Kluge, Inc., St. Paul, Minn. Application June 30, 1941. 3 claims.

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D. C.

Senator to Investigate Printing Equipment Purchases

THE Joint Committee on Printing, of which Senator Carl Hayden of Arizona is chairman, will investigate the peacetime use of government-owned printing equipment purchased during the war. Printing Industry of America, Inc., in December called upon the Congressional group to reduce the number of government printing establishments at least to pre-war levels and eliminate competition with private industry.

According to James R. Brackett, General Manager of the association, scores of printing establishments are maintained by Army, Navy, and other government agencies throughout the country. Mr. Brackett estimates that as much as $300,000,000 worth of printing and reproduction equipment was purchased by various government agencies during the war. Very little, if any, has yet been declared surplus.

In a statement authorized for publication, Senator Hayden said, "The Joint Committee on Printing is concerned about the prospect of enlarged government printing facilities outside of the Government Printing Office, which might develop if establishments created during the war are maintained or expanded.

"To learn exactly what the facts are, the Committee will confer with the Public Printer and the Budget Bureau for the purpose of obtaining an analysis of equipment and plans for its use during peacetime."

In a letter to Senator Hayden, Mr. Brackett said: "We cannot vouch for the exact accuracy of our information; there is no single source that we have been able to find which can report to us exactly what plants there are, where they are, what they contain, and what it is planned to do with them. Therefore, the following information is tentative in character.

"It is reported to us that the Army has some 60 or more printing establishments throughout the country and that it contemplates, at lower echelons at least, the consolidation of this equipment into perhaps a half-dozen fully-equipped installations.

"Similarly, the Navy, with several score scattered installations plans to consolidate them into a much smaller number.

"We are further advised that the Reconstruction Finance Corporation is planning to build, or is building, several offset plants.

"The Treasury Department, we are advised, either has or contemplates a number of establishments of one kind or another.

"We are further informed that the Department of Agriculture, Department of Commerce, Social Security Board, Railroad Retirement Board, and presumably others, have printing establishments.

"Obviously enough, if consolidation and other plans are as they are reported to us, we face the probability of a field system of relatively large units operating without coordination in competition with the Government Printing Office and with the commercial printing industry. Such a system would have inherent capacity for growth and would constitute a real competitive threat.

"As you undoubtedly know, the commercial printing industry is extremely eager to obtain equipment. We believe most emphatically that any plans for the maintenance of wartime printing facilities, or, for that matter, the maintenance of pre-war facilities, is unjustified without a complete study of the present situation."

Leading Stereotypers Choose "COME-BACK" and "STAY-BACK"

STEREOTYPERS who have the "Know-How" use Eastern Tru-Mold Cork Molding Blankets because of their superior "come-back" qualities. These same properties make for sharp, clean impressions even after severe usage. They have greater flexibility that keeps edge cracking to a minimum. Made with just the right amount of Bakelite to insure perfect density. Only tru-Molds have these properties.

Tru-Molds can be had in either "Medium," "Medium-Hard" or "Hard" density in the following sizes.

Sizes	1/4" Each	5/16" Each	3/8" Each	3/16" Each
20" x 24"	$2.50	$3.75	$4.50	.....
21" x 25"	2.75	4.00	4.75	$2.50
22" x 26"	3.00	4.25	5.00	.....

(One size only on 3/16"—21" x 25")

Send in your order now

LEADING stereotypers use "Flecto" Gummed Backing Felt to secure maximum "stay-back" resulting in clean-cut plates. "Flecto" sticks flat to the mat regardless of heat used in scorching. It is free from cracking, slipping or crystallizing. Order it in sheets or strips. Either way it cuts or tears easily, cleanly and without ragged edges. Accurately gauged, uniform throughout, soft, pliable; will not peel or separate in layers; conforms to and shrinks with the mat.

Place your order today in either sheets or strips for the following sizes.

GAUGES AND SIZES

Gauges .021, .025, .030 (Green) sheeted 18" x 24".

Gauge .035 (Red) sheeted 18" x 24".

Gauges .040, .045 (Green) sheeted 18" x 22".

Gauges .050, .060 (Gray) sheeted 18" x 22".

Cut into strips 9" or 18" long and 1/8" to 1" wide at no extra charge.

EASTERN NEWSPAPER SUPPLY

9603 NORTHERN BOULEVARD — CORONA, L. I., NEW YORK

Cutright Reports for Hoe

R. Hoe and Co., Inc., reports for the fiscal year ended September 30, 1945, a net profit of $586,991 after all charges, including Federal income and excess profits taxes of $3,209,000, a provision for renegotiation of $410,000 and a reserve for contingencies of $250,000. This was equivalent after preferred dividends to $5.90 a share on the Class "A" stock and compares with a net profit of $502,878, or $4.97 per "A" share, in the previous fiscal year.

Net sales for the year amounted to $21,370,589 against $16,509,360 in the preceding year, an increase of 29.4 percent. Balance sheet as of September 30, last, disclosed current assets of $5,148,790 and current liabilities of $2,619,262, leaving a net working capital of $2,529,528.

Harold G. Cutright, president, in discussing the need for diversification of the Company's products, declares in his report to stockholders that mergers provide a logical and economical means of expansion and that this goal can be best attained through an equitable plan of recapitalization. Thus far, Mr. Cutright points out, Class "A" dividend arrears of $7,663,760 have effectively blocked such a program, adding, however, that the company will continue to sponsor any recapitalization plan acceptable to both Class "A" and common stockholders.

Commenting upon the outlook, Mr. Cutright says 1946 will bring a severe decline in sales volume as compared with 1945 because the end of the war found the company with little or no peacetime work-in-process. This, he explains, makes it necessary to build up production considerably before any substantial billings can be made. While the company has a large backlog of press orders on its books, Mr. Cutright cautions stockholders that the immediate outlook holds many uncertainties, including Government price regulation and rising manufacturing costs.

AVAILABLE
PRINTING EQUIPMENT
SALES ENGINEER

Assets:

1. **Established Sales Record**
2. **Widely Varied Knowledge of Printing Industry**
3. **Excellent Trade Contacts**
4. **Highest References.**

Only interested in proposition offering real possibilities. Free to travel. Eastern territory preferred. Identity of all inquiries fully protected. Reply Box No. 247, *Printing Equipment Engineer.*

A scientific achievement in mat making. Burgess Chrome Mats are laboratory tested through every step of the manufacturing process to insure uniformity and dependability. They are surprisingly easy to manipulate, too . . . which makes them the favorite mat with stereo operators.

A Laboratory Product
BURGESS Chrome MATS

Burgess Chrome Mats have what it takes to faithfully reproduce all the beauty of the original copy. They mold perfectly so that every dot registers just where it belongs . . . and this holds true in spite of high or low shrinkage.

Chances are you know all this because you're using them. If not . . . switch today, for here's a quality mat you can absolutely depend on. A mat that'll make your reproductions sing with attention value!

BURGESS CELLULOSE COMPANY
Manufacturers and Distributors of Burgess Chrome and Tone-Tex Mats
FREEPORT • ILLINOIS
Pacific Coast Representative
RALPH LEBER CO., 426 Polson Bldg., SEATTLE, WASH

Newsprint Order Lifted Industry Control Prevails

THE newsprint order, L-240, covering the distribution and use of newsprint was lifted on December 31, John D. Small, Administrator of the Civilian Production Administration, announced on December 21. "The decision to eliminate newsprint control through the revocation of the newsprint order has been based on the recent recommendations of the Special Newsprint Committee of the American Newspaper Publishers Association, the Newspaper Industry Advisory Committee and the Boren Congressional Committee on Newsprint, and on the statement issued by the American Newspaper Publishers Association, on November 28, 1945," Mr. Small said. The first two committees represent a cross section of the newspaper publishers and include representatives of both large and small newspapers.

The supply of newsprint in 1946 is expected to be 98% of the 1941 supply. While this is not adequate to meet demands, it is considered sufficient to warrant revocation of the order in view of the recommendations of the industry. Newsprint supplies for the first half of 1946 were estimated by Civilian Production Administration officials at approximately 1,935,000 T., which they said would be equal to 98% of the newsprint used in the same period in 1941. Approximately 1,500,000 T. of the newsprint supply is expected to come from Canada, 335,000 T. from domestic production and 100,000 T. from Newfoundland.

"Wherever materials are scarce," the Civilian Production Administrator said, "the supply must be spread out and inventory controls continue. In most cases of scarce materials there may be enough

HOW TO KNOCK THE SOCKS OFF *your type metal costs*

You can "knock the socks off" your yearly type metal costs by using Imperial's Plus Plan. This time-tested method of metal control keeps casting temperatures to a minimum for lower fuel bills and dross losses; besides—it eliminates down-time due to faulty metal.

The Imperial Plus Plan treats each user as an individual with personalized service to fit his needs. Periodic analysis of his working supply furnishes the information about his needs—the Plus Plan prescribes the proper adjusting alloy.

That's the way to reduce your type metal costs. May we tell you more?

IMPERIAL TYPE METAL CO.

Serving The Graphic Arts Industry Only

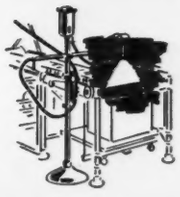
Philadelphia 34 New York 7 Chicago 50

Imperial

USE

W-R
SPRAYER GUN WAX

- Can be used on all colors successively. No sandpaper effect.
- Harmless to press and operators. Safe to use on food labels and wrappers.
- Makes a fine, light spray or mist that is almost invisible.
- Absolutely colorless. Will not affect the most delicate tints or colors.



W-R
PROCESS COLOR WAX

- Mixes with any lithograph, offset or letter-press inks—colors or black.
- Assures perfect lifting and blending of colors. Simplifies printing of solids.
- Prevents offsetting, mottling, picking and sticking. Keeps inks from crystalizing.
- Indispensable for transparent colors and process work.

W-R Sprayer Gun Wax and W-R Process Color Wax have been standard with printers everywhere for almost half a century.

SEE YOUR DEALER OR WRITE FOR SAMPLE

WAX REFINING COMPANY

to take care of minimum needs of all, but not enough to permit some purchasers to buy all they would like. There is an obligation on both buyers and sellers in such cases to be fair."

Mr. Small emphasized that in the event the voluntary plan breaks down and newspapers are threatened with suspension of publication, his agency will act promptly to reinstitute newsprint controls either through a general order or through the use of the priorities power in special cases.

In order to prevent any unreasonable accumulation of the available supply, inventory control will be continued, it was stated, through an amendment to Priorities Regulation 32 limiting newsprint inventories to 25 days consumption in the Eastern and Central States and 45 days in the Western States, based on the average daily consumption in the last six months of 1945. Any newspaper will be permitted to maintain an inventory of 60 T.

Newspaper Associations Operating Under Voluntary Plan

UNDER date of January 9, the American Newspaper Publishers Association issued a statement in which it was stated:

"A substantial majority of all city, state and regional newspaper associations representing daily and weekly newspapers throughout the country have adopted plans and set machinery in motion to care for any newspaper threatened with suspension because of lack of newsprint. This action was the outcome of a conference called by the American Newspaper Publishers Association on November 28 to consider a voluntary newsprint plan developed by the New England Daily Newspaper Publishers Association to care for any bona fide newspaper facing suspension because of lack of newsprint.

"The newspaper publishers of the United States, through their associations are assuring the government and newspapers of all sizes that government controls on newsprint will not have to be reinstituted and that no newspaper will be forced to suspend publication because of inability to secure newsprint.

"The New England Plan provides that each newspaper pledges up to 3% of its newsprint supply to be available to any distressed newspaper, daily or weekly."

In the statement issued by ANPA, it is also asserted that a goodly number of metropolitan newspapers have given assurance of full cooperation. In addition, 26 state and local associations have signified cooperation, and it is expected that 20 others will report favorably as soon as their membership can be polled.

PIA Moves Constructively . . .

THE Executive Committee of Printing Industry of America met in Washington, D. C., during the middle of December. The session was devoted to thorough exploration of outstanding problems of the commercial printing industry.

Among the matters discussed were recruiting of new employees by the industry and the training of veterans under the G. I. bills, the disposal of surplus government owned printing machinery and paper, the business management services to be offered by PIA, the national distribution of Printing Industry Trade Customs as authorized by the convention, the distribution of the 1945 ratio studies, the educational program of the industry, and the general labor situation as it will affect open and closed shop sections of the industry.

Present at the meeting were James F. Newcomb, President, New York, N. Y.; Donald L. Boyd, Vice-President, Huntington, W. Va.; Richard Chamberlin, Treasurer, Washington, D. C.; Ralph Thomas, Secretary, Detroit, Mich.; and the following members of the Executive Committee: S. Frank Beatty, Chicago, representing the Trade Association Executives; Carl E. Dunnagan, Chicago; Harold W. Hill, past president, Cleveland; Allerton H. Jeffries, Los Angeles; Fred E. Little, Wilmington, N. C.; Clyde K. Murphy, St. Louis, Mo.; and Walter J. Twiname, Indianapolis, Ind.

James R. Brackett, PIA general manager, reported there had been a net increase of 57 members since the Pittsburgh convention in October.

During the session, the Executive Committee took numerous actions and

The Royle Router

- A large table mounted on a rigidly constructed column.
- Convenient alignment and tightening of driving belts.
- Running parts designed to reduce vibration.
- Sufficient speed at cutter edge to route fine or rough out without reducing speed.
- Precisely fulcrumed elevating mechanism assures immediate reaction to pressure on the foot pedal.
- Changing cutter heads a matter of seconds.
- Speed and balance are built into Royle Routers.

JOHN ROYLE & SONS

Established 1855

10 Essex Street Paterson 3, N. J.

BEVERIDGE DRY MATS *are Dependable*

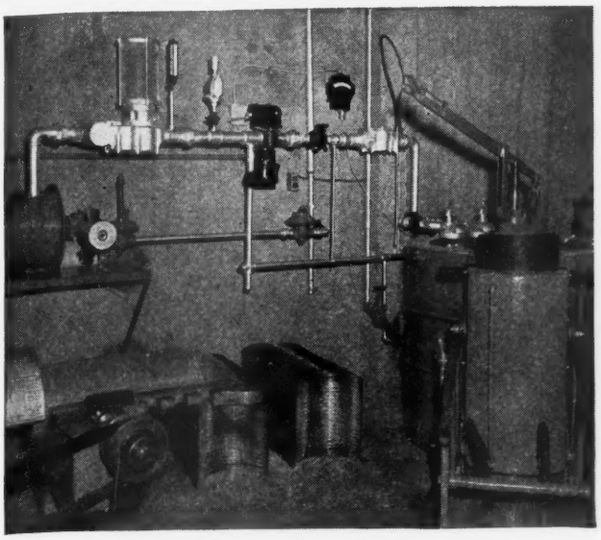
SAMPLES TO YOUR SPECIFICATIONS GLADLY SENT GRATIS UPON REQUEST

New Products Division

THE BEVERIDGE PAPER COMPANY

INDIANAPOLIS 4, INDIANA

60 YEARS OF PAPER MAKING SKILL



KEMP

IMMERSION HEATED MELTING UNITS

Maximum economy is being realized on hundreds of installations.

★ ★ ★

Salient Features:

Balanced design

Safety

Minimum dross formation

Improved plates

★

The illustration is in operation at a Central American newspaper plant.

For more complete information write for Bulletins 1-179 and 1-200.1

★

The C. M. KEMP MFG. CO.

405 E. Oliver St. • Baltimore 2, Md.

KEMP of BALTIMORE

Booth's Zink Cut Cement prices in the United States: 75c per tube; $6.00 per dozen tubes; $5.00 per dozen tubes in gross lots.

Use It Sparingly

At the risk of monotonous repetition, we want to emphasize that ***Booth's Zink Cut Cement*** should be used sparingly for maximum results. When used as directed on the tube, you secure (1) Maximum adhesive qualities, and (2) The cement in the tube can be made to fasten a greater number of cuts. Fastens any kind of cut to wood or metal base.

Positive Cam Response

On line-composing machine keyboards can be secured through the use of ***Booth's Black Rubber Rolls.*** These rolls are of constant diameter throughout their length when applied properly to the shaft. $1.45 per pair; $7.75 per dozen rolls. Order a trial pair today.

E. A. BOOTH

RUBBER COMPANY

MAHONING BANK BLDG., YOUNGSTOWN, OHIO

COMPOSITORS *Praise* THE C&G NO. 3-A SAW TRIMMER

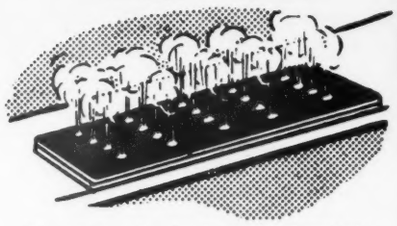
"It's fast — it's accurate — easy to adjust." So say experienced compositors who like the simple, safe, and speedy action of the precision-built C & G No. 3-A Saw Trimmer. All sawing operations completely safeguarded at all times.

Write for illustrated folder and list of nearby users.

MILWAUKEE SAW TRIMMER CORP.
610 EAST CLYBOURN STREET, MILWAUKEE 2, WISCONSIN

STEREOTYPE PERFORATED GUMMED PACKING FELT

Important where considerable shrinkage is employed



Manufactured under Patent No. 1,967,444

Is More Flexible • Forms with the Mat • Dries Faster • Sets Instantly

Send for a Trial Order Today — Sheets or Cut Strips

American Publishers Supply
P. O. Box 924 **Lynn, Mass.**

set several basic policies on operating matters among which were:

Authorized the PIA staff to move aggressively to prevent the continuous or further expansion of government printing plants set up by the Army, Navy and other agencies during the war. Urge as a matter of policy that these plants be liquidated, that government competition with industry be vigorously opposed, that the government not purchase additional paper supplies until a thorough inventory of present supplies is taken.

Approved the plan for nationwide distribution of printing trade practices repromulgated with the inclusion of lithographic trade practices by the 59th annual convention of the industry in Pittsburgh. Copies of the trade practices are to be suitably printed and made available to members - at - large and through local associations to all printers in the country. Local associations are to be furnished with a plan for using the trade practices to build their own organizations.

Endorsed the printing endowment fund of Carnegie Institute as "an exceptional worthwhile project for which we urge the substantial support of all printers individually as a means of increasing the skills and general standing of the industry."

GAVC Dissolved

THE Graphic Arts Victory Committee has been dissolved. The work for which it was organized and its activities have been completed. Under the directorship of Henry Hoke, GAVC functioned to help the Government put across many of its objectives—all this through a group representing a liberal cross section of the Graphic Arts industry. Members of the Graphic Arts, by reputation, are not good at cooperating one with another, particularly with respect to collective action which would benefit all groups making up the industry. In the instance of GAVC, however, collective action did succeed. We hope the motives of the sustaining membership were actuated purely by an industry-wise viewpoint. It is our hope that GAVC, although it was a war-born baby, will have set a pattern for future collective objectives in the Graphic Arts. The Printing Industry of America and/or the Graphic Arts Trade Association Executives might be able to accomplish something.

Plates for Comics

(Continued from Page 16)

Equipment Engineer under the article, *What Is It?* on page 22.

Tints on those drawing boards can be developed at will by the application of a chemical that may be brushed on. The problem of outline and guide lines for these tints has been met in an ingenious manner. Three impressions in a non-actinic ink, usually blue, are pulled from the finished line cut of the black plate upon the particular board, either Craftint or Washtone, whichever blue ink is chosen because it fails to register photographically on the emulsion used in the photographic operation following completion of the development of the tint on the art board. Incidentally, negatives made from these prepared impressions are all line shots because they already contain the screen in the board surface.

It is necessary, of course, that screen angles be considered although violations have at times resulted in no visible defect. It is advisable, however, in proving the sheets with the screens below the surface that provision be made to get the screen dots running at the correct screen angle direction for each color. Yellow presents no problem, for a stipple may be used in this color. However, if the conventional halftone formation is used the screen angle for the yellow is usually chosen at 90 deg. It is customary, to use the red at 45 deg., while the blue is held at 75 deg., both in the regular 65 line newspaper screen. A black screen angle of 45 deg. is conventional in printing because dots running at that angle prove least objectionable to the eye. This practice has been retained in the field of comic books but in addition, the red also is found at that angle. Some correction is attempted by means of a different screen count in the tint of either color at the same angle. In extreme cases, red, blue, and black have been found at the same 45 deg. angle, with compensation in the form of different screen count in the red and black, while a line tint is used for the blue instead of half-tone dots.

Extra shaded areas can be obtained through the use of white or black top sheets. Gradation tints similar to those laid in Ben Day work may be obtained through use of the "Washtone" or

Conventional Method	Shortcut Method
one camera operation	four camera operations
one stripping operation	no stripping operations
three art work operations	no art work operations
one original sketch	one original sketch
one color overlay	one color overlay
no proof impression	three proof impressions
no copy preparation on proofs	three copy preparations on proof
four plates	four plates

PROTECT

your job...your plant...yourself

JUSTRITE

● **Fire hazards are also job hazards. Fire prevention through the installation of safety approved equipment is the logical answer. Justrite Safety Products meet the highest safety approvals . . . they give you fire protection at a minimum cost.**

JUSTRITE Oily Waste Can

Is the safety approved container for those oily, dangerous rags and waste that are a necessary evil in every pressroom. Tested and approved for safety, and so marked, by Underwriters' Laboratories, Inc. and the Associated Factory Mutual Fire Insurance Companies. The Oily Waste Can may be had with or without foot lever . . . there are no springs. The top closes automatically. They come in a wide range of sizes to fit every shop need and are standard equipment in plants all over the country.

Oily Waste Can

See your printing supplier for specifications and price.

JUSTRITE MANUFACTURING COMPANY

2063 N. Southport Ave., Dept. J-2, Chicago 14, Illinois

JUSTRITE *Safety Products*

SAFETY CANS · FILLING CANS · OILY WASTE CANS

APPROVED SAFETY ELECTRIC LANTERNS

"AS ADVERTISED"

Because their high quality has been maintained throughout their 142 years, Johnson Inks are relied upon to be "as advertised" by printing craftsmen everywhere.

CHARLES ENEU JOHNSON AND COMPANY

GOOD INKS SINCE 1804

10th and Lombard Streets, Philadelphia, Pa.

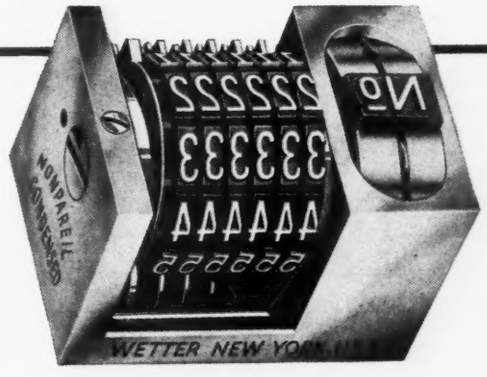
New York • Chicago • Boston • St. Louis • Cleveland • Detroit

Baltimore • Kansas City • Pittsburgh • Atlanta • Dallas

WETTER FACTS AND FACSIMILE...

123456

FACSIMILE



NONPAREIL CONDENSED MODEL

THESE three characteristics of design are *exclusive* features of Wetter Numbering Machines: (1) Rigid, one-piece, solid steel frame—keeps all wheels perfectly aligned at all times. (2) Oval-shaped plunger—permits no wobbling, no smudging, no smearing. (3) V-slot in wheel shaft—carries lubricating oil *evenly* to all wheel bearings. For these and many other reasons, you can number *better* with a *Wetter.*

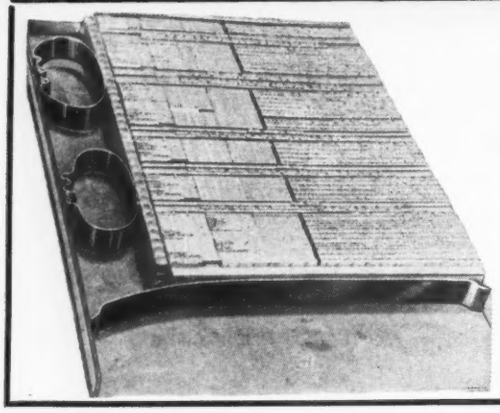
New Wetter Number Machines will soon be available again in increasing quantities. They will help you round out your new printing equipment. Due to new skills developed by Wetter during the war years, and to improved raw materials now available, Wetter Numbering Machines are of better quality now than ever before. They make *Numbering for Profit* an even sounder printing slogan today.

653

WETTER NUMBERING MACHINE CO. Atlantic Avenue & Logan Street, Brooklyn 8, N. Y.

Sold by All Dealers and Branches of AMERICAN TYPE FOUNDERS

CUT PRODUCTION COSTS WITH RIEHLOCK GALLEY LOCKS



SAVE 90% OF TIE-UP TIME
•
PERFECT PROOFS
•
SAFE STORAGE
•
MADE IN ALL SIZES
•
GUARANTEED FOREVER

Width of Galley	Price per Hundred	Width of Galley	Price per Hundred
3½ inch	$ 8.00	10 inch	$12.00
26½ pica	10.00	10½ inch	12.00
6¼ inch	10.00	12 inch	15.00
6½ inch	12.00	17¼ inch	23.00
8¾ inch	12.00	19½ inch	26.00

Size	GALLEY SIDE LOCK	Price per Hundred
8 inch		$ 8.00
12 inch		12.00

Prices 20% higher in smaller quantities.
PRICES ON OTHER SIZES OR INFORMATION UPON REQUEST.

RIEHL GALLEY LOCK CO., INC.
1312 ONTARIO ST., CLEVELAND 13, OHIO

similar material in which the tint strength is determined by the length of time the chemical developer is permitted to act.

Great flexibility is offered through the medium of these shading mediums. For illustration, a standard single-tone board may be used for the red and blue colors. Wherever greater strength is desired, a piece of top sheet with its transparent base is laid. Wherever lighter shades are required (a rare occurrence) the single-tone tint is not developed but a lighter strength top sheet tint is laid to the outlines in blue ink on the proof sheets.

After the preparation of each sheet, with its full complement of tints and solids portraying the color strength each sheet presents, a line shot is made from each on glass. As before mentioned, no halftone screen is needed in this operation. Neither is there any further art work required, nor is the negative turned after photography. The use of a prism and standardized procedure insures perfect register on the part of the three colors with the black from which the proofs were pulled.

Plates are made from these negatives using the common cold top enamel method, following which mats are made from the plates as in conventional work.

Comparison of the two methods reveals the advantages held by the shortcut and with it the reason for the lower costs possible by the latter method.

Summing up, it will be seen that copy preparation eliminates all art work on the plates. This elimination of art work on plates more than overbalances the additional camera work, and impression pulling. Stripping, too, is eliminated, for all photography takes place through prism. Comparison of costs for the plates of one 64-page comic book is reported to favor the shortcut method by being as much as 50% lower than costs for the conventional method. And so once more progress has provided amusement and enjoyment for young and old alike in the form of low-priced comic books.

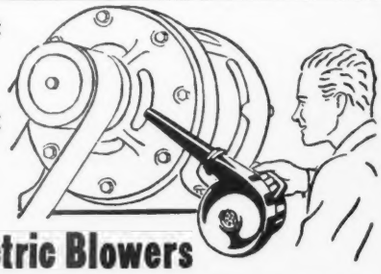
A variation of the above is being employed in the offset-lith field, where it is said, the use of a finer screen at proper screen angles worked in the lithographic manner makes possible a really high grade and economical product.

BAUM FOLDERS

RUSSELL ERNEST BAUM
615 Chestnut Street Philadelphia, Pennsylvania

Printing Equipment Engineer would be pleased to receive technical items that would be of interest to mechanical executive readers.

Cleaner Type
Less Loss
Better Work
when you blow out dust with



TORNADO Electric Blowers

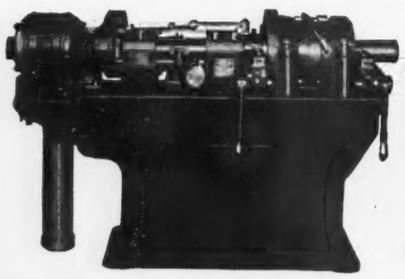
Powerful 1 h. p. motor blows clean, dry air at 295 m. p. h. Cleans type, cases, presses, thoroly, quickly, at low cost. Convertible into Vacuum Cleaner. Soon pays cost.

Write for details and Free Trial Offer!

BREUER ELECTRIC MFG. CO.
5114 N. Ravenswood Ave., Chicago, 40

DUPLEX TUBULAR FINISHING MACHINE

It takes but a few seconds for this combination machine to cut off the tail, bevel both ends, and bore the inside of the plate to correct size.



★

THEDUPLEX PRINTING PRESS CO.
BATTLE CREEK MICHIGAN
New York Chicago

TINGUE, BROWN & CO.
114-120 EAST 23rd ST., NEW YORK 10, N.Y. 723 E. WASHINGTON BLVD., LOS ANGELES 21, CAL.
1227 WABASH AVE., CHICAGO 5, ILLINOIS 507 PETERS STREET, S.W., ATLANTA, GA.
CANADIAN SALES AGENTS ROSS WHITEHEAD & CO. LTD. MONTREAL, CANADA

LASTING IMPRESSIONS

because . . .

With machinery restrictions removed, we are installing the finest mat making equipment.

WOOD DRY MATS

WOOD FLONG CORPORATION
HOOSICK FALLS, N. Y.
NEW YORK CITY OFFICE:
551 FIFTH AVENUE, NEW YORK 17, N. Y.

53 Years . . .

of highly specialized experience goes into the manufacture of the

CUSHMAN (OFFSET) MOTOR

for Linotype and Intertype machines.

•

It's performance results from a tradition of solid New England craftsmanship.

Cushman Motor Division

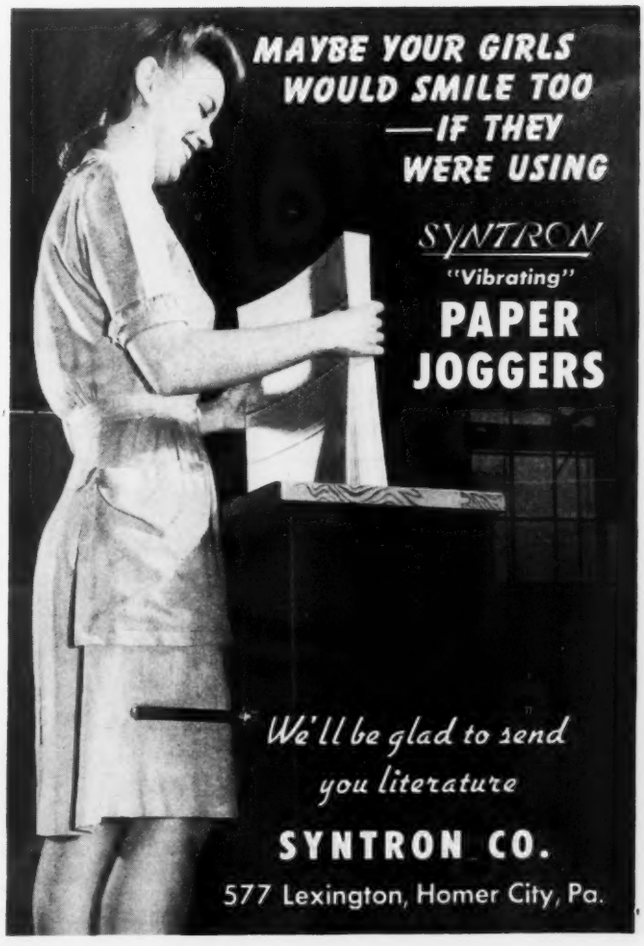
LINOTYPE PARTS COMPANY
WEATHERLY, PENNA.

100% Automatic
SLUG SAWING WITH
MOHR SAW

Now, more than ever, Mohr saw owners appreciate the important savings in time, made possible by this automatic slug saw. Slugs are cut to any desired length as they are ejected from the linecasting machine. 100% automatic operation. Accurate and speedy.

Write for information about the Mohr Measure Control Unit—the quick-changing feature which makes possible instant and precise adjustment of slug length.

MOHR LINO-SAW COMPANY
126 N. Union Avenue Chicago 6, Ill.


MAYBE YOUR GIRLS WOULD SMILE TOO —IF THEY WERE USING
SYNTRON
"Vibrating"
PAPER JOGGERS
We'll be glad to send you literature
SYNTRON CO.
577 Lexington, Homer City, Pa.

THE PRINTED PAGE
ALSO
HAS A CERTAIN TONE

Like the resonance of a fine instrument, its clarity and effective gradation exert their lure before any particular theme has unfolded itself . . . Stereotyping can make or mar the tone of a newspaper page. Stereotyping is often improved by a change to Certified Mats.

CERTIFIED DRY MAT CORPORATION

9 Rockefeller Plaza, Dept. M
New York 20, N. Y.

For dependable Stereotyping rely on Certified Mats

Certified DRY MATS

It is NEW — It Is BETTER
★ DEEPMOLD CREEPER ★

The most advanced development in molding creepers—the Deepmold Creeper—molds exceptionally deep bolsters, gives sharp halftone reproductions, will not cut or spread column rules.

Sizes	Prices
20 x 24 x ½"	$3.50 ea.
21 x 25 x ½"	3.65 ea.
22 x 26 x ½"	3.80 ea.

Place a trial order today

EASTERN NEWSPAPER SUPPLY
9603 Northern Blvd., CORONA, L. I., NEW YORK

STANDARD EQUIPMENT
ON MANY LEADING TRIMMERS

This perfected SWW paper trimming knife features:

1. **A .002" concave bevel; grinding to a razor edge sharpness made easier.**
2. **Greater rigidity—limits variance across a trim to less than .001" inch.**
3. **Special heat treatment responsible for the knife's unusual edge holding qualities.**

On the market for 60 years. Thousands of printers use them. Yours awaits your order—by letter, wire or phone.

SIMONDS WORDEN WHITE COMPANY
607 NEGLEY PLACE
DAYTON, OHIO

SWWCo

A.P.S.

STEREOTYPE
GUMMED PACKING
CORK BLANKETS
CREEPERS
POURING SHEETS
ROUTER BITS
TAILBOARDS

ALWAYS BEST AT

AMERICAN PUBLISHERS SUPPLY
P. O. Box 924 Lynn, Mass.

QUICKER CLEANUPS with TORNADO

KEEP your plant clean — protect machinery — reduce power costs—salvage scrap — with the TORNADO Portable Industrial Vacuum Cleaner. Powerful. Portable. Picks up dust, dirt, chips, etc. Light weight. Large capacity.

Write for details and Free Trial Offer!

TAKE THE DUST OUT OF DUSTRY

TORNADO
PORTABLE ELECTRIC BLOWER

BREUER ELECTRIC MFG. CO.
5114 N. Ravenswood Ave., Chicago 40

OHIO KNIVES

OK BLACK ARROW *Trimmer Knives*

A special heat treatment of the steel assures you of extra long life between grinds and a tough edge for all kinds of cutting.

OHIO KNIFE CO. • CINCINNATI 23, OHIO

EQUIPMENT FOR PRINTERS

Mitering machines · Composing sticks · Slug clippers · Band saws · Lead and rule cutters · Newspaper bases, files and racks.

H. B. ROUSE & COMPANY

2214 North Wayne Ave. Chicago, Illinois

Here is Help Twenty-five illustrations and briefed descriptions of Vandercook Proof Presses and PREMAKEREADY equipment will enable you to make comparisons, and select the most logical machine for your needs. Write for booklet and full information today.

VANDERCOOK
PROOF PRESSES · BLOCK LEVELLERS
PREMAKEREADY EQUIPMENT

VANDERCOOK & SONS, 900 N. Kilpatrick Ave., Chicago 51, Ill.

SAFETY·RELIABILITY·ECONOMY

CLINE
PRESS DRIVES
and
CONTROL
Reels, Tensions
and Pasters...

CLINE SYSTEM

CLINE ELEC. MFG. CO.
Chicago: 211 West Wacker Drive
New York: 220 East 42nd Street
San Francisco: 1st Nat'l Bank Bldg

— CLASSIFIED —

HELP WANTED

Designers of Machinery
For Printing Press Work

WALTER SCOTT & CO., INC.
525 South Avenue Plainfield, New Jersey

WANTED TO BUY

Linotype with 8 pt., 10 pt., 14 pt. and 18 pt. matrices and gas pot. Also want to buy good proof press. Address Dick Handwick, *Bowling News*, 4154 North Kilbourne Ave., Chicago 41, Ill.

WANTED FOR CASH

Photo Engraving and Offset Equipment
Complete Plants or any part

Dispose of your surplus equipment NOW!

CONSOLIDATED PHOTO ENGRAVING EQUIPMENT CO.
2646 North Avenue Chicago 47, Ill.

★ **STAR CUT CEMENT** ★

For Mounting

CUTS...STEREOTYPES...ELECTROTYPES

65c per tube-$5.25 per doz. $5.00 per doz. in two doz. lots, $4.00 per doz. in gross lots.

★ STAR CEMENT COMPANY
45 Malone Avenue, BELLEVILLE 9, N. J. ★

RICHARDS Saws SINCE 1910

"MULTIFORM"
"ELECTROMATIC"
"DOMORE" "CLIPPER"
SAWS — ROUTERS — DIES
J. A. RICHARDS CO., Kalamazoo, Mich.

ADVERTISERS' ALPHABETICAL INDEX FOR JANUARY 1946

American Publishers Supply....36-40
American Type Founders....6-23
Atlantic Zinc Works....27
Baum, Russell Ernest....38
Beveridge Paper Co....34
Bingham's, Sam'l, Son Mfg.... 4
Booth, E. A., Rubber Co....35
Breuer Electric Mfg. Co....38-40
Burgess Cellulose Co....32
Certified Dry Mat Corp....40
Challenge Machinery Co....29
Champlain Co., Inc.... 8
Cline Electric Mfg. Co....41
Consolidated Photo Engraving Equipment Co....41
Duplex, The, Printing Press Co....38
Eastern Newspaper Supply....31-40
Harris-Seybold....Inside Front Cover
Hoe, R., & Co....21
Huber, J. M., Inc.... 2
Imperial Type Metal Co....33
Intertype Corp....Outside Back Cover
Johnson, Charles Eneu, & Co....37
Justrite Mfg. Co....37
Kemp, C. M., Mfg. Co....35
Linotype Parts Co....29-39
Ludlow Typograph Co.... 7
Matrix Contrast Corp....10
Mergenthaler Linotype Co....19
Miller Printing Machinery Co.... 3
Milwaukee Saw Trimmer Corp....36
Mohr Lino-Saw Co....39
Monomelt Co....30
Ohio Knife Co....40
Rapid Roller Co....25
Richards, J. A., Co....41
Riehl Galley Lock Co., Inc....38
Rouse, H. B., & Co....41
Royle, John, Sons....34
Scott, Walter, & Co., Inc....41
Simonds Worden White Co....40
Sta-Hi Corp.... 1
Star Cement Co....41
Syntron Co....39
Vandercook & Sons....41
Wax Refining Co....33
Wetter Numbering Machine Co....37
Wood Flong Corp....39
Wood Newspaper Machinery Corp.... 9

ANNUAL EDITORIAL INDEX

JANUARY 1945 TO DECEMBER 1945 INCLUSIVE

A

Accidents and Light, by J. L. Kilpatrick, 14, May.
Alberg, Alex J., Prerogatives, 11, Jan.
American Point System, 92, Dec.
Aniline Printing, by Hans J. Luehrs, 23, Oct., 15, Nov.
Announces Plan to Increase Carnegie Tech. General Endowment Fund, 49, Feb.
Annual Editorial Index, 1944, 38, Jan.
Another Way to Express First Impression Troubles, by Auburn Taylor, 16, May.
Appraisal of Printing Industry with Reference to Veterans' Job Opportunities, by H. W. Hill, 28, Oct.
Arnesen, A. C., Space Counts in Plant Layouts, 54, June.
Arthur, Furman C., Metallic Ink Printing Technique, 28, Feb.
As Long as we remain Teachable, by C. A. Dunnagan, 45, Aug.
Auxiliary Filling Piece for Chute Rail Block, by Oscar Carlson, 17, Mar.
Auxiliary Lighting Helps Presswork, 52, Aug.
Award of Merit, GPO's, 15, Apr.

Associations:

A.N.P.A.

Feature Introduced in Annual Page Sizes and Paper Roll Width Report, 32, May.
Research in the Newspaper Field, 39, June.
Thanked for Canceling ANPA Conference, 38, Apr.

Craftsmen:

Abbreviated Meeting to be Held by Craftsmen, 26, Apr.
Book Auctions May Multiply, 34, Mar.
Craftsmen Hold Business Meeting, by Herman A. Slater, 41, Aug.

Great Lakes Mechanical Conference:

Comments on the Great Lakes Photo Engraving Bulletin No. 3, 36, Oct.
Example of Efficiently Operated Daily Newspaper Composing Room, by the Technical Committee, 23, Feb.
Follows Distinct Pattern, 27, Sept.
Great Lakes Conference, 11, Nov.
Human Element in Newspaper Photo-engraving, 19, July.

Illinois Conference:

Iowa Conference:

N.A.P.L.:

NAPL Holds Informative Convention, 97, Dec.

New England Conference:

Facts and Fantasy, I. Tornberg, 100, Dec.
Galaxy of Speakers Address New England Newspaper Conference, Francis M. Britton, 81, Dec.

New Jersey Conference:

New Jersey Newspaper Mechanical Conference, Julian Pollak, 16, Jan.

Northwest Conference:

Youngsters Got The Pheasants, 21, Feb.

Pacific Newspaper Mechanical Conference:

Pacific Mechanical Conference Postpones, 38, Apr.
Wartime Mechanical Conference, 40, Aug.

P.N.P.A.:

Appoints New Mechanical Committee, 46, Apr.

Printing Industry of America:

Printing Industry of America Now Going Concern, 48, Aug.

S.N.P.A.:

U.T.A.:

Unity in the Graphic Arts, 19, Feb.

B

Baird, A. J., Membership in Craftsmen's Club Makes Better Mechanical Executive, 44, Aug.
Baker, Claude L., Research from Composing Room Executive's Standpoint, 42, June.
Big Printing Plant in Rural Community, by MacD. Sinclair, 7, July.
Bishop, Amos W., Personal Benefits Received from Craftsmen's Club, 47, Aug.
Book Auctions May Multiply, 34, Mar.
Britton, Francis M., Galaxy of Speakers address New England Mech. Conf., 81, Dec.
Brodie, Geo., Unit to be Built Magazine Press Dires Ink on Paper thru Steam Drum, 36, Aug.
Burns, A. H., Newspaper Research, 40, June.
Burns, Harold T., Magnesium for Photo-engraving.

Books:

Cost and Production Tables for Offset-Lithographers, 84, Dec.
How to Handle Labor Grievances, John A. Lapp, 91, June.
How to Handle Negotiations for Collective Bargaining, 48, Nov.
Industrial Housekeeping Manual, by R. F. Vincent.
Intertype Specimen Book, 21, Sept.
Johnson & Higgins University Book, 107, Dec.
LFT's New Manual On Lithographic Inks, 22, Oct.
Offset Plate Making—Deep Etch (Gum) Process, 26, Mar.
1945 Packaging Catalog, 78, Aug.
Photography and Platemaking for Photo-Lithography, 53, Oct.
Primer in Book Production, by Frank B. Myrick.
R. H. and Exp. Time Study Progressing, 52, Oct.
SKF Publishes 270-Page Book on Bearing Engineering, 48, Nov.
Two Booklets for Foreman, 53, Oct.

Bindery:

Guide Block Permits Hairline Trim, 54, Aug.
Non-Warping Book Cover Paste Technique, 45, July.

C

Caption Slugs for Marking Cuts—Fuses and Light Bulbs in Metal, 20, Jan.
Carlson, Oscar, Auxiliary Filling Piece for Chute Rail Block, 17, Mar.
Carney, J. H., Printing Plant Drive Maintenance, 83, Dec.
Chapin, Kenneth W., How Mental and Mechanical Troubles Were Overcome, 26, Feb.
Claybourn, L. W., Nero Fiddled While Rome Burned, 23, Aug.
Color Pictures Can be Transmitted by Wire, 44, Sept.
Color Printing, by M. George Martin, 27, Sept.
Committee on Static Electricity; Static Electricity in the Printing Industries, 18, Mar.
Condensed Equipment Specifications Catalog Section, 207, Dec.
Conferences Will Be Just As Much Needed After War As Before, W. E. Wines, 44, June.
Counting Machine Is Useful On Linotype, 26, Sept.
Craftsmanship Advances Procedures and Skills, by Edwin Lennox, 45, Aug.
Craftsmen Hold Business Meeting, by Herman A. Slater, 41, Aug.
Crafts, Curtis S., New Stereo Plate Lockup, 11, Mar.
Curry, John B., Monotype Keyboard Cubicles, 26, Sept.

Composing:

American Point System, 92, Dec.
Auxiliary Filling Piece for Chute Rail Block, by Oscar Carlson, 17, Mar.
Caption Slugs for Marking Cuts—Fuses and Light Bulbs in Metal, 20, Jan.
Counting Machine is Useful on Linotype, 26, Sept.
Floors in Printing Plant Discussed, by Francis A. Westbrook, 15, Mar.
Intertype Pot Mouthpiece Baffle Plate Remover, H. C. Johnson, 52, June.
Letterpress Printing Element Heights and Thicknesses, 94, Dec.
Level Type-High Form Important, 42, Apr.
Magazines Systemized, 55, Aug.
Monotype Keyboard Cubicles, John B. Curry, 26, Sept.
Origin of Type Heights and Sizes, by Herman R. Freund, 15, May. 64, June.
Photo-Typesetting—Will It Work? 15, Sept.
Pig Ear Skid, 40, Apr.
Printing Type From Plastics, Dr. M. E. Laeis, 38, Sept.
Proof Press Outlook, by E. O. Vandercook, 47, Nov.
Sawing Stereotype Base at an Angle, 32, Aug.
Simple Problem—Simple Solution, 59, June.
Tapered Dash Jig, Roy Rothstein, 36, Feb.
Thermoplastic Adhesives for Mounting Cuts, 24, Sept.
Type Count Finder, 28, Sept.
Worker Motion Reduced to Minimum (Monson-Chicago), by A. G. Fegert, 18, Apr.

D

Darkening of Bright Silver Surfaces of Copper Electrotypes, by M. S. Kantrowitz, 38, Nov.
Delectable Keepsake Book Was Carefully Planned, 26, Mar.
Demonstrate New Equipment for Making Electrotype Plastic Molds, 42, Feb.
Determining Machinery Profit, by W. F. Schaphorst, 32, July.
Develops Gadi Print Process for Quantity Production of Army Map Blue Prints, 25, Feb.
Device Facilitates Mounting Engraved Plates on Stereotype Curved Dummy, 41, July.
Dickerson, Robert W., Elements to Think About When Planning the New Plant, 95, Dec.
Shall We Remodel or Build Now?, 49, Aug.
Troublesome Problems, 21, Feb.
Dunnagan, Carl A., As Long as We Remain Teachable, 45, Aug.

E

Elements to think about when planning the New Plant, by Robert W. Dickerson, 95, Dec.
Employee Benefits Importanr Part of Gannett Operation, 22, Sept.
English, Theodore, Press Makers See Big Business, 45, June.
Example of Efficiently Operated Daily Newspaper Composing Room, Technical Committee, 23, Feb.

Editorials:

Keep on Your Toes, 13, Oct.
Nero Fiddled While Rome Burned, L. W. Claybourn, 23, Aug.
Photo-Typesetting—Will It Work? 15, Sept.

Engraving:

Are You Thinking of Starting a Photo-Engraving Business? 99, Dec.
Color Pictures Can Be Transmitted by Wire, 44, Sept.
Comment on the Great Lakes Photo-Engraving Bulletin No. 3, 36, Oct.
Device Facilities Mounting Engraved Plates on Stereotype Curved Dummy, 41, July.
Floors in the Printing Plant Discussed, Francis A. Westbrook, 15, Mar.
Human Element in Newspaper Photo-engraving, 19, July.
Magnesium for Photo-Engraving, Harold T. Burns, 51, June.
Proof Press Outlook, E. O. Vandercook, 47, Nov.
Thermoplastic Adhesives for Mounting Cuts, 24, Sept.
Transmission of Color Pictures by Facsimile, 38, July.
Unorthodox Methods, 21, Mar.
Zinc Plate Resurfacing Tool, 53, June.

Equipment and Supplies:

Ace Portable Electric Blower, 20, Nov.
Aluminum Container for Glues and Padding Compounds, 20, Nov.
Anti-Offset Dry Sprayer, 20, Nov.
Anti-Vibration and Machinery Leveling Device, 89, Dec.
Assembler Slide Brake Operating Lever, 86, Dec.
ATF Electronic Paper Jogger, 90, Dec.
ATF Portable Offset Camera and Platemaking Machine, 47, June.
ATF Precision Remote Controls, 32, Feb.
Automatic Central Pumping Unit for Lubrication System, 30, Feb.
Automatic Transporter Paper Handling Truck, 19, Oct.
Bird-White Temperature Exchanger, 32, Aug.
Cable and Wire Stripper, 46, June.
Cold Cathode Fluorescent Fixtures (8 ft.).
Consolidated Darkroom Precision Color Camera, 33, Aug.
Copy Fitting Method, Pocket Edition, 35, Aug.
Corrosion Resistant Bulletin Available, 34, Aug.
Craftsman Table Equipment, 35, Aug.
Develops Gadi Print Process for Quantity Production of Army Map Blue Prints, 25, Feb.
Doyle Infrared Dryer, 48, June.
Economy Narrow-Front Skid Lifter, 20, Sept.
Elco Universal Typometer, 35, Aug.
Electro-Matic Infra-Red Burn-in Oven for Photo-Engravers, 23, Nov.
Electronic Rewinder Drive and Electronic Cut-off Register Control, 22, Jan.
Electronic Timer for Timing Operations, 88, Dec.
Emulsifying Degreasant, 35, Apr.
Exposure Meter Improved, 87, Dec.
Flex-Back Bookbinding Adhesive, 49, June.
F-S Optical Contour Comparator, 12, May.
Fluorescent Lamp Efficiency Increased, 48, June.
Fluorescent Lamp Ratings, 32, Feb.
General Silent Bloc Bulletin, 33, Aug.
Grand Quickset Bench Vise, 46, June.
Handling Bulky Loads by Truck, 46, June.
Hand Trucks and Light-Weight Wheels, 86, Dec.
Harris 17 x 22 Offset Press.
Heavy Duty Metallizing Gun Announced, 89, Dec.
High Voltage Disconnect Switch, 20, Nov.
Hoe Convertible 4-color 50 x 72 Offset Press, 32, Apr.
Hoe Color-Convertible Newspaper Printing Press, 22, Nov.
Honig Multiple Gathering Machine, 46, June.
Hooper Hydraulic Shaftless Mill Roll Stands, 20, Sept.
Hurletron Exposure Control, 90, Dec.
Incandescent Lamps for Vibration Service, 88, Dec.
Indicator Feature Added to Challenge Quoin, 20, Nov.
Instrument for Testing 5-50-V. Circuits, 35, Apr.
Interchangeable Swivel Forks for Power Trucks, 22, Jan.
Intertype Specimen Book, 21, Sept.
Intertype Split Intermediate Shaft, 19, Oct.
Korker Newspaper Press Blanket, 20, Nov.
Lamps Permanently Locked Wabash-Birdseye, 89, Dec.
Large Size Bellows Air Motor, 13, May.
Light Source for Ultra-High Speed Photography, 88, Dec.
Light Steel Racks and Electric Truck for Handling Printed Matter, 50, Nov.
Metron Portable Tachometer, 19, Nov.
Miehle Postwar Presses, 47, June.
Mobile Stock and Repair Cart, 21, Mar.
Multipress Improved, 18, Sept.
Multi-Scale Monocular, 87, Dec.

Opatone Colors for Graphic Arts, 20, Oct.
Pad Press, Large Size, 19, Sept.
Paper Roll Lifter by Economy, 91, Dec.
P. & E. Deci-Point Slide Rule, 49, Nov.
Penetrate Cleans Intertype Molds, 19, Oct.
Plastic Fluorescent Lamp Bases, 13, May.
Plastic Molding Equipment and Supplies, 33, Aug.
Portable Steel Desk, 48, June.
Properties of Santocel for Printing Inks, 32, Feb.
Proportion Slide Rule, 35, Apr.
Pulsing Control Drive Yardeny System, 87, Dec.
Rechargeable Flashlight Battery, 13, May.
Rubber Cement for Bonding Materials, 26, Mar.
Running Belt Tension for Rotary Printing Presses, 21, Nov.
Self-Lubricating Bearings, 13, May.
Silk Screen Inks are Alcohol Resistant, 35, Apr.
Sprayer Gun Wax and Process Color Wax, 44, Nov.
Sta-Hi New Model Flat Plate Shaver, 19, Oct.
Steel Work Bench Improved, 19, Sept.
Stereotex Auxiliary Press for Plastic Electrotype Molding, 32, Aug.
Stroboscopic Light Source, 18, Sept.
Talk-a-Phone Power Booster, 12, May.
Tenite Spools for Carbon Paper Rolls, 48, June.
Tensomatic Sheet Positioning Device, 28, July.
Thermometer and Linotype Second Elevator Spring, 22, Jan.
Thermoplastic Cement for Mounting Photo-Engravings, 90, Dec.
Towne Automatic Line Stop for Linotypes and Intertypes, 23, Nov.
Type Size and Space Gauge, 18, Sept.
Unit to be Built in Magazine Press Dries Ink on Paper, by Geo. Brodie, 36, Aug.
Universal Charts for Precision Printing, 30, Feb.
Vapolith Ink Drying Process for Web Offset Presses, 19, Sept.
Varitronic Variable Speed Motor Controls, 19, Nov.
Vinylite Plastics for Electrotype Molds, 47, June.
Water-Resistant Adhesives, 30, Feb.

F

Facts and Fantasy, I. Tornberg, 100, Dec.
Fegert, A. G., Worker Motion Reduced to Minimum, 18, Apr.
Finding Length of Material in Rolls, W. F. Schaphorst, 113, Dec.
First Impression Offset, Frank Parker, 25, Sept.
Fiske, F. C., Retiming Eliminates Slur on First Impression Printing, 16, Apr.
Floors in Printing Plant Discussed, Francis A. Westbrook, 15, Mar.
Fluorescent Lamps Alter Maintenance, 80, Aug.
Freund, Herman R., Origin of Type Heights and Sizes, 15, May. 64, June.
Fuller, George, Research in the Stereotype Department, 43, June.

G

Galaxy of Stated Speakers at New England Newspaper Mechanical Conference, Francis M. Britton, 81, Dec.
Gannett Executive Changes, 37, Apr.
Giegengack Peeps into Future with Respect to Technology of Graphic Arts Industries, Hon. A. E. Giegengack, 30, Nov.
Graining Abrasives for Lithographic Zinc Plates, 21, Sept.
Gravure Process, Adam Henri Reiser, 85, Dec.
Great Lakes Photo Engraving Bulletin No. 3, Comments, 36, Oct.
Guide Block Permits Hairline Trim, 54, Aug.
Gutenberg Bible Motif Used in Printing Executive's Holiday Greeting, 14, Jan.

Gravure:

Gravure Process Discussed by experts at New York Craftsmen's Club, Adam Henri Reiser, 85, Dec.
Photo-Typesetting—Will It Work? 15, Sept.

H

Harner, Carl, Membership in Craftsmen's Club Makes Better Mechanical Executive, 46, Aug.
Hill, Harold W., Appraisal of Printing Industry for Veterans Jobs, 28, Oct.
Hodgkinson, Elmer, Paint for Safety, 14, Oct.
Hogan, Russell B., Looking Forward into Postwar Period, 58, Apr.
How Membership in Craftsmen's Club Makes Better Executive, Carl Harner, 46, Aug.
How Mental and Mechanical Troubles Were Overcome, Kenneth W. Chapin, 26, Feb.
How to Count Revolutions without a Speed Counter, W. F. Schaphorst, 26, Apr.
How to Measure Bearing Clearance Without Micrometer, W. F. Schaphorst, 30, July.
Huber, Walter, Research in the Graphic Arts, 29, Aug.
Huddleston, Robert B., Printers Urged to Plan for Postwar, 28, Apr.
Human Element in Newspaper Photo-Engraving, 19, July.
Human Element in Plant Operation, Edwin H. Stuart, Inc., 15, Oct.

I

Impression Line, by Earl Lacure, 31, Aug.
Improvement Needed in Mailing Room, Joe Menard, 44, June.
Improve Operation of Autoplates in Stereotype Dept. Rochester Times, 28, July.
Inking System for Offset-Lith Press, Shop Manual No. 5, 25, Apr.
Ink Trouble Chart Has Been Revised, 24, Apr.
Interesting Observations, Louis A. Lara, 46, Feb.
Interesting Story, 12, Jan.
Intertype Pot Mouthpiece Baffle Plate Remover, H. C. Johnson, 52, June.

Ink:

Ink Trouble Chart Has Been Revised, 24, Apr.
What is Color?, George Welp, 18, Jan.

J

Jennison, Ebbie M., That Which Is Needed by Newspaper Photo-engravers, 42, June.
Jensen Printing Co. Receives GPO's Certificate of Merit, 66, June.
Joe Bloe's Production Board Meeting, W. W. Warfel, 60, June.
Johnson, Harold C., Intertype Pot Mouthpiece Baffle Plate Remover, 52, June.
Johnson, Otis H., Personal Progress by Association in Craftsmen's Club, 44, Aug.

K

Kantrowitz, M. S., Darkening of Bright Silver Surfaces of Copper Electrotypes, 38, Nov.
Keating, John, Research from the Production Manager's Viewpoint, 41, June.
Kilpatrick, J. L., Accidents and Light, 14, May.
Kingsbury, J. A., Most Industries Will Develop Innovations Slowly, 16, May.

L

Lacure, Earl, Impression Line, 31, Aug.
Laeis, Dr. M. E., Printing Type From Plastics, 38, Sept.
Law of Change, Harry Loose, 24, Mar.
Lennox, Edwin, Craftsmanship Advances Procedures and Skills, 45, Aug.
Letterpress and Offset—Merits Discussed by Two Printing Executives, 79, Dec.
Level, Type-High Form Important, 42, Apr.
Lithography Defined, 24, Mar.
Looking into Postwar Period, Russell B. Hogan, 58, Apr.
Loose, Harry, Law of Change, 24, Mar.
Luehrs, Hans J., Aniline Printing, 23 Oct., 15, Nov.

Letters to the Editor:

Lighting:

Auxiliary Lighting Helps Presswork, 52, Aug.
Fluorescent Lamps Alter Maintenance Requirements, 80, Aug.
Plant Lighting Modernized, 72, June.

M

Magazines Systematized, 56, Aug.
Magnesium for Photo-Engraving, Harold T. Burns, 51, June.
Manufacturers', Suppliers' and Dealers' Index, 197, Dec.
Marine Operates Keyboard, 68, June.
Martin, M. George, Color Printing, 27, Sept.
Meaning of Craftsmenship to Plant Executives, 44, Aug.
Membership in Craftsmen's Club Makes Better Mechanical Executive, A. J. Baird, 44, Aug.
Menard, Joe, Improvement Needed in the Mailing Room, 44, June.
Metallic Ink Printing Technique, by Furman C. Arthur, 28, Feb.
Monotype Keyboard Cubicles, John B. Curry, 26, Sept.
Most Industries Will Develop Innovations Slowly, J. A. Kingsbury, 16, May.

N

Navy to Present Award to Printers and Lithographers, 24, Apr.
Nero Fiddled While Rome Burner, L. W. Claybourn, 23, Aug.
New Jersey Newspaper Mechanical Conference, Julian Pollak, 16, Jan.
New Lockup, Curtis S. Crafts, 11, March.
Newspaper Research, A. H. Burns, 40, June.
Newspaper Tubular Mat Filing Cabinet, 38, Sept.
New York Herald Tribune Wins Ayer Cup Permanent Possession, 10, May.
Non-Offset Solutions, Adelaide R. Smith and Wm. J. Burke, Ch.E., 23, Mar.
Non-Warping Book Cover Paste Technique, 45, July.
Notes on Resin-Bonded, Wet-Strength Paper, C. G. Weber, 38, Aug.

New Plants:

Elements to Think About When Planning the New Plant, Robt. W. Dickerson, 95, Dec.
Miller Publishes Pressroom Floor Plan and Layout Kits, 89, Dec.
Shall We Remodel or Build New, Robt. W. Dickerson, 49, Aug.
Space Counts in Plant Layouts, A. C. Arnesen, 54, June.
Troublesome Problems, Robert W. Dickerson, 21, Feb.

O

Offset's Place as Printing Process, 81, Aug.
Oldofredi Process, 11, Oct.
Origin of Type Heights and Sizes, Herman R. Freund, 15, May. 64, June.
Oswald, L. E., What My Company Gets Out of Craftsmen Club, 45, Aug.

Offset-Lith:

Graining Abrasives for Lithographic Zinc Plates, 21, Sept.
Ink Trouble Chart Has Been Revised, 24, Apr.
Letterpress and Offset—Discussed by two printing executives, 79, Dec.
Lithography Defined, 24, Mar.
NAPL Holds Informative Convention, 97, Dec.
Offset's Place as Printing Process, 81, Aug.
Porter Discusses Growth of Offset-Lithography During War, H. A. Porter, 22, Mar.
Prevention of Dermatitis Among Lithographers, 35, Apr.
Preservative for Gum Arabic Solutions, 37, Apr.
Should a Letter Printer Install Offset Equipment?, Walter E. Soderstrom, 14, Nov.
Static Electricity, by Committee on Static Electricity, 18, Mar.
Study of Chrome Dermatitis Among Lithographers, 25, Apr.
Worker Motion Reduced to Minimum, A. G. Fegert, 18, Apr.

P

Pressroom:

Another Way to Express First Impressions Troubles, Auburn Taylor, 16, May.
Auxiliary Lighting Helps Presswork, 52, Aug.
Color Printing, M. George Martin, 27, Sept.
Device Facilities Mounting Engraved Plates on Stereotype Curved Dummy, 41, July.
Finding Length of Material In Rolls, W. F. Schaphorst, 113, Dec.
First Impression Offset, by Frank Parker, 25, Sept.
Floors in the Printing Plant Discussed, Francis A. Westbrook, 15, Mar.
Impression Line, Applying Correct Packing on Tubular Newspaper Presses, Earl Lacure, 31, Aug.
Ink Trouble Chart Has Been Revised, 24, Apr.
Letterpress and Offset—Discussed by Two Printing Executives, 79, Dec.
Letterpress Printing Element Heights and Thicknesses, 94, Dec.
Level, Type-High Form Important, 42, Apr.
Metallic Ink Printing Technique, Furman C. Arthur, 28, Feb.
Printing Plant Drive Maintenance Insures Continuous Operation, J. H. Carney, 83, Dec.
Retiming Eliminates Slur on First Impression Printing, F. C. Fiske, 16, Apr.
Simple Problem—Simple Solution, 59, June.
Spatter Printing, Herman A. Slater, 9, Jan.
Static Electricity, by Committee on Static Electricity, 18, Mar.
Steam Set-Ink, 16, Sept.
Stereo Plate Lockup, Curtis S. Crafts, 11, Mar.
Temp. and R. H. in the Pressroom, Herman A. Slater, 28, Aug.
Unit to Be Built in Magazine Press Dries Ink on Paper, Geo. R. Brodie, 36, Aug.
What is Color?, George Welp, 18, Jan.

Printing Patents Reports:

31, Jan.; 37, Feb.; 29, Mar.; 43, 44, 46, Apr.; 23, May; 75, June; 33, July; 63, Aug.; 35, Sept.; 37, Oct.; 37, Nov.; 114, Dec.

Paint for Safety, Elmer Hodgkinson, 14, Oct.
Paper Trade Name Index, 195, Dec.
Parker, Frank, First Impression Offset, 25, Sept.
Personal Benefits Received From Craftsmen's Club, Amos W. Bishop, 47, Aug.
Personal Progress through Association of People of Like Interest, O. H. Johnson, 44, Aug.
Photo-engravers Research, Inc., Under Way at Battelle, 49, June.
Photo-Typesetting—Will It Work?, 15, Sept.
Pig Ear Skid, 40, Apr.
Pint Size Stephen Daye Press Now at Smithsonian Institute, 46, Nov.
Plant Lighting Modernized, 72, June.
Pollak, Julian, New Jersey Newspaper Mechanical Conference, 16, Jan.
Porter Discusses Growth of Offset-Lithography During War, H. A. Porter, 22, Mar.
Porter, H. A., Reconversion at Harris-Seybold-Potter, 30, Oct.
Postwar Engraving Plant, 36, Apr.
Preference Should Be Given Graphic Arts Industries, 22, Feb.
Prerogatives, Alex J. Alberg, 10, Jan.
Prescription for Commercial Letterpress Printing, J. Homer Winkler, 26, Aug.
Preservative for Gum Arabic Solutions, 37, Apr.
Press Makers See Big Business, Theodore English, 45, June.
Prevention of Dermatitis Among Lithographers, 35, Apr.
Printers Urged to Plant for Postwar, Robert B. Huddleston, 28, Apr.
Printing Equipment and Supplies Indexes, 181, Dec.
Printing Industry of America, Inc., Now Going Concern, 48, Aug.

Printing Plant Drive Mtce. Insures Continuous Operation, J. H. Carney, 83, Dec.
Printing Press Specifications—Letterpress, Offset, Gravure and Die Stamping, 223, Dec.
Printing Type From Plastics, Dr. M. E. Laeis, 38, Sept.
Production Managers Endorse 1000 Sq. In.—1000 Sheet Count, 51, Oct.

Paper:

Finding Length of Material in Rolls, W. F. Schaphorst, 113, Dec.
Guide Block Permits Hairline Trim, 54, Aug.
Notes on Resin-Bonded, Wet-Strength Paper, C. G. Weber, 38, Aug.
Paper Trade Name Index, 195, Dec.
Table of Paper Grades, 58, Aug.

Plastics:

Printing Type From Plastics, Dr. M. E. Laeis, 38, Sept.
Thermoplastic Adhesives for Mounting Cuts, 24, Sept.
Unorthodox Methods, 21, Mar.

Production Methods:

Aniline Printing, Hans J. Luehrs, 23, Oct., 15, Nov.
Big Printing Plant in Rural Community, MacD. Sinclair, 7, July.
Employee Benefits Important Part of Gannett Operation, 22, Sept.
Example of Efficiently Operated Daily Newspaper Composing Room, Technical Committee, 23, Feb.
Gravure Process Discussed at New York Craftsmen's Club, Adam Henri Reiser, 85, Dec.
Heads Consulting Engineering Firm, 16, Apr.
How Mental and Mechanical Troubles Were Overcome, Kenneth W. Chapin, 26, Feb.
Human Element in Plant Operation, Edwin H. Stuart, 14, Oct.
Joe Bloe's Production Board Meeting, W. W. Warfel, 60, June.
Miller Publishes Pressroom Floor Plan and Layout Kit, 89, Dec.
Paint for Safety, Elmer Hodgkinson, 14, Oct.
Prerogatives, Alex J. Alberg, 10, Jan.
Production Managers Endorse 1000 Sq. In.—1000 Sheet Count, 51, Oct.
Space Counts in Plant Layouts, A. C. Arnesen, 54, June.
Troublesome Problems, Robert W. Dickerson, 21, Feb.

R

Reiser, Adam H., Gravure Process Discussed at New York Craftsmen's Club, 85, Dec.
Retiming Eliminates Slur on First Impression Printing, F. C. Fiske, 17, Apr.
Retired Paper Currency Destroyed by New Method, 88, June.
Rothstein, Roy, Tapered Dash Jig, 36, Feb.

Research:

Aniline Printing, Hans J. Luehrs, 23, Oct., 15, Nov.
Catalog by Battelle, 83, Aug.
Color Pictures Can Be Transmitted by Wire, 44, Sept.
Color Printing, M. George Martin, 27, Sept.
Darkening of Bright Silver Surfaces of Copper Electrotypes, M. S. Kantrowitz, 38, Nov.
Determining Machinery Profit, W. F. Schaphorst, 32, July.
Develops Gadi Print Process for Quantity Production of Army Map Blue Prints, 25, Feb.
Experimental Runs Improve Appearance and Readability of Newspaper, 26, Feb.
Giegengack Peeps into Future with respect to Technology of the Graphic Arts, Hon. A. E. Geigengack, 30, Nov.
Graining Abrasives for Lithographic Zinc Plates, M. S. Kantrowitz, 21, Sept.
Heads Consulting Engineering Firm, L. W. Claybourn, 16, Apr.
How to Count Revolutions without a Speed Counter, W. F. Schaphorst, 26, Apr.
Human Element in Newspaper Photo-engraving, 19, July.
LTF Opens Research Center, 93, Dec.
1946 LFT Research Program, 93, Dec.
Metallic Ink Printing Technique, Furman C. Arthur, 28, Feb.
Nero Fiddled While Rome Burned, L. W. Claybourn, 23, Aug.

Newspaper Research:

From Composing Room Executive's Standpoint, C. L. Baker, 42, June.
From Publisher's Viewpoint, L. I. Noyes, 40, June.
From the Production Manager's Viewpoint, John Keating, 41, June.
In the Graphic Arts, Walter Huber, 29, Aug.
In The Newspaper Field, 39, June.
In the Pressroom, E. R. Weiskittel, 43, June.
In the Stereotype Department, George Fuller, 43, June.
Oldofredi Process, 11, Oct.
Prescription for Commercial Letterpress Printing, J. Homer Winkler, 26, Aug.
Printing Ink Research Bulletin, 42, Sept.
Research Bulletin, 32, Sept.
Research in the Graphic Arts, Walter Huber, 29, Aug.
Research in the Newspaper Field, 39, June.
Research Programs in the Graphic Arts, 22, Mar.
Space Counts in Plant Layouts, A. C. Arnesen, 54, June.
Spatter Printing, Herman A. Slater, 9, Jan.
Technical Research, J. Homer Winkler, 9, May.
Temp. and R. H. in the Pressroom, Herman A. Slater, 28, Aug.
Thermoplastic Adhesives for Mounting Cuts, 24, Sept.
Time Increases Research Facilities, 93, Dec.

Rubber Plates:

Aniline Printing, Hans J. Luehrs, I 23, Oct.; II 15, Nov.
Photo-Typesetting—Will It Work?, 15, Sept.
Unorthodox Methods, 21, Mar.

S

Sawing Stereotype Base at an Angle, 32, Aug.
Schaphorst, W. F., Determining Machinery Profit, 32, July.
How to Count Revolutions without a Speed Counter, 26, Apr.
Finding Length of Material in Rolls, 113, Dec.
How to Measure Bearing Clearance without a Micrometer, 30, July.
Selecting the Right Job for the Handicapped Veteran, 59, Apr.
Shall We Remodel or Build New?, Robt. W. Dickerson, 49, Aug.
Should a Letterpress Printer Install Offset Equipment?, Walter E. Soderstrom, 14, Nov.
Simple Problem, Simple Solution, 59, June.
Sinclair, MacD., Big Printing Plant in Rural Community, 7, July.
Slater, Herman A., Craftsmen Hold Business Meeting, 41, Aug.
Spatter Printing, 9, Jan.
Temp. and R. H. in the Pressroom, 28, Aug.
Smith, Adelaide R., M.D., and Burke, Wm. J., Ch. E., Non-Offset Solutions, 23, Mar.
Soderstrom, Walter E., Should a Letterpress Printer Install Offset Equipment?, 14, Nov.
Some Examples of Wartime Greeting Cards for Christmas 1944, 14, Jan.
Space Counts in Plant Layouts, by A. C. Arnesen, 54, June.
Spatter Printing, by Herman A. Slater, 9, Jan.
Static Electricity, by Committee on Static Electricity, 18, Mar.
Steam Set-Ink for Eliminating First Impression Offset, 16, Sept.

Stereotype:

Color Printing, George Martin, 27, Sept.
Device Facilitates Mounting Engraved Plates on Stereotype Curved Dummy, 41, July.
Floors in the Printing Plant Discussed, Francis A. Westbrook, 15, Mar.
Improve Operation of Autoplates in Stereotype Dept. Rochester *Times Union*, 28, July.
New Lockup, Curtis S. Crafts, 11, Mar.
Newspaper Tubular Mat Filing Cabinet, 38, Sept.
Paint for Safety, Elmer Hodgkinson, 14, Oct.
Sawing Stereotype Base at an Angle, 32, Aug.

T

Table of Paper Grades, 58, Aug.
Tapered Dash Jig, Roy Rothstein, 36, Feb.
Taylor, Auburn, Another Way to Express First Impressions Troubles, 16, May.
Temp. and R. H. in the Pressroom, Herman A. Slater, 28, Aug.
Tenets for Business Presented, George S. May, 48, Feb.
That Which is Needed by Newspaper Photo-engraver, Ebble M. Jennison, 42, June.
Thermoplastic Adhesives for Mounting Cuts, 24, Sept.
Thompson, H. E., Management Likes Production Executives in Craftsmen's Club, 44, Aug.
Today's Proof Press Outlook, E. O. Vandercook, 47, Nov.
Tornberg, I., Facts and Fantasy, 100, Dec.
Trade Name Index, 181, Dec.
Transmission of Color Pictures by Facsimile, 38, July.
Troublesome Problems, Robert W. Dickerson, 21, Feb.
Type Count Finder, 28, Sept.

U

Unit to Be Built in Magazine Press Dries Ink on Paper, Geo. R. Brodie, 36, Aug.
Unity in the Graphic Arts, 19, Feb.
Unorthodox Methods, 21, Mar.

V

Vandercook, E. O., Today's Proof Press Outlook, 47, Nov.

W

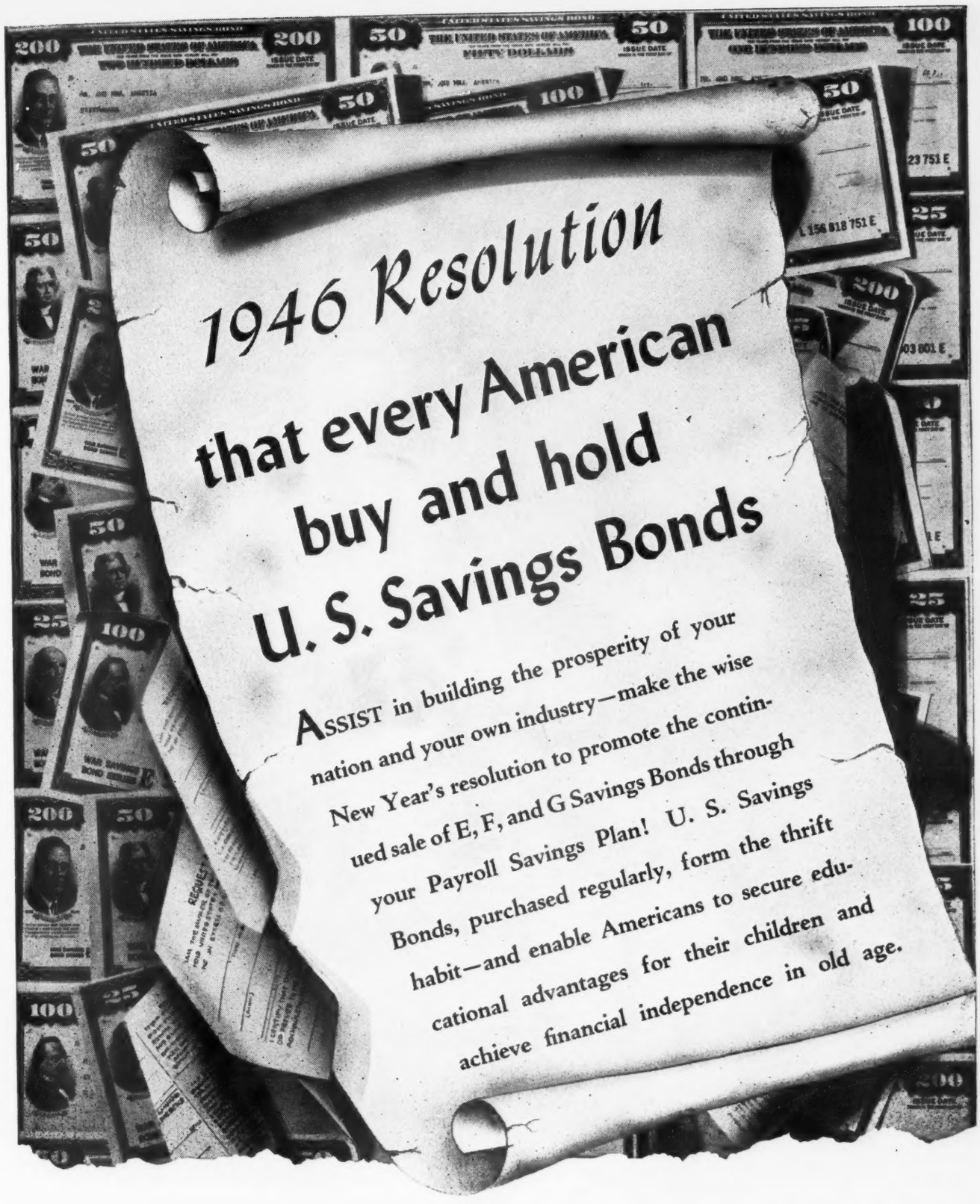
Warfel, W. W., Joe Bloe's Production Board Meeting, by W. W. Warfel, 60, June.
Warping of Book Covers, 38, Apr.
Wartime Mechanical Conference, 40, Aug.
Waryn, John A., What I Get Out of Craftsmen's Club Membership, 46, Aug.
Weber, C. G., Notes on Resin-Bonded, Wet-Strength Paper, 38, Aug.
Weiskittel, Earl R., Research in the Pressroom, 43, June.
Welp, George, What is Color?, 18, Jan.
Westbrook, Francis A., Floors in the Printing Plant Discussed, 15, Mar.
What I Get Out of Craftsmen's Club, John A. Waryn, 46, Aug.
What is Color?, George Welp, 18, Jan.
What My Company Gets Out of Craftsmen's Club, L. E. Oswald, 45, Aug.
Why Management Likes Production Executives in Craftsmen's Club, H. E. Thompson, 44, Aug.
Wines, W. E., Conferences Will Be Just As Much Needed After War as Before, 44, June.
Winkler, J. Homer, Prescription for Commercial Letterpress Printing, 26, Aug.
Technical Research, 9, May.
Worker Motion Reduced to Minimum, A. G. Fegert, 18, Apr.

War Production Board:

Above Average Paper Inventories, 52, Apr.
Base Weights Lowered in Printing and Writing Paper, 36, May.
Basis for Appeal Revised, 37, May.
Book Order L-245 Amended, 36, May.
Brightness Limitations Removed, 77, Aug.
Changes in Paper Order L-120, 47, July.
Chicago Sun Relieved of Suspension Order, 55, Feb.
Cited for Overuse of Paper, 86, June.
Cited for Misuse of Paper, 48, Sept.
Commercial Printing and Print Paper Controlled, 47, July.
Commercial Printing Order Amended L-241, 22, May.
Controls on Tin Tightened, 52, Apr.
Curtail Use of Lead, 35, May.
Denied WPB Assistance for Two Months, 36, Jan.
Directed to Reduce Orders by 5%, 77, Aug.
Distribution Refused, 44, July.
Enforce Magazine Print Paper Regulation, 82, June.
Essential and Critical Activities in Graphic Arts, 53, Feb.
Fell is Reconversion Officer, 86, June.
Few Bags and Certain Papers, 54, Apr.
Forbids Exports for Resale, 47, July.
Four Firms Charged with Paper Over Use, 34, May; 80, June.
Form WPB-541 Streamlined, 54, Apr.
Fractional Horsepower Motor Sale Controls Explained, 56, Feb.
Government Commercial Printing Order L-340 Amended, 35, May.
Greeting and Postcard Order Amended, 35, May.
Increase Paper Board Production, 35, May.
Issue Instruction Pamphlet for WPB-1319, 52, Apr.
Issue Statement With Respect to Paper Situation, 39, Mar.
Made Subject to Order Limiting Paper, 41, Mar.
May Apply by Letter for Quota, 55, Feb.
May Use 120 Lb., 80, June.
Magazine Paper Order L-244 Amended, 22, May.
Must Deduct Paper from Quotas, 56, Feb.
Must Reduce Newsprint Consumption, 54, Apr.
Newspaper Building Application Approved, 39, Mar.
Newsprint Situation First Six Months 1945, 36, Jan.
Newsprint Used for Wrapping and Packing, 84, June.
No Additional Paper Curtailments, 30, Jan.
No Statement Needed, 53, Feb.
Order L-Commercial Printing and Duplicating Amended, 44, July.
Order L-78 Revoked, 82, June.
Order L-226 Revoked, New Printing Machinery, 50, June.
Orders L-244 and L-245 Amended, 42, Mar.
Order M 11-B (Zinc) Revoked, 44, July.
Paper Distributor Order to Cut Quota, 30, Jan.
Paper Orders Revoked, 46, Sept.
Paper Quotas for Book Publishers Increase, 76, Aug.
Price Additions on Light-Weight Book Papers, 46, July.
Printing Firm Ordered to Cut Paper Quota, 76, Aug.
Printer Held to Be Negligent, 46, July.
Print Paper Overuse Adjusted, 84, June.
Process (Machine) Coated Basis Weight Fixed, 35, Jan.
Recent WPB Actions, 39, May.
Recommends 5% Reduction in Newsprint Deliveries, 57, Apr.
Reconversion Pricing Methods, 48, Sept.
Release Heavy Paper in Frozen Inventory, 74, June.
Restrictions on Idle Paper, 27, Sept.
Revise Definition of Paper Products Converter, 35, Jan.
Revokes M-286, 86, June.
Small Motors Delivery Permitted, 76, Aug.
Summaries of Recent WPB Actions, 53, Feb.
Suspension and Consent Orders Announced, 74, Aug.
Suspension Order Issued, 56, Feb.
Tin Supply Critically Low, 74, Aug.
Trade Convention Regulations Announced, 54, Feb.
Two Firms Penalized for Paper Violations, 37, Jan.
Uniform Cut Will Be Applied if Further Paper Cut is Necessary, 30, Jan.
Urges Conservation of Four-Color-Process Red Inks, 43, Mar.
Violations of Orders Announced, 77, Aug.
Von Tress Succeeds Shook, 82, June.
Waste Paper Not a Condition of Sale, 40, Mar.
Will Make Reductions from Normal Quotas, 74, June.
Will Make Quota Paybacks, 47, July.
Will Repay Overconsumption, 37, Jan.
Withdraw Sale of Magazines, 34, May.
WPB's Motor Directory, 76, Aug.
WPB Explains Deletion, 55, Feb.
Zinc To Be Returned to Allocation, 43, Mar.

XYZ

Youngsters Got The Pheasants, 21, Feb.
Zinc Plate Resurfacing Tool, 53, June.


1946 Resolution
that every American
buy and hold
U. S. Savings Bonds
ASSIST in building the prosperity of your nation and your own industry—make the wise New Year's resolution to promote the continued sale of E, F, and G Savings Bonds through your Payroll Savings Plan! U. S. Savings Bonds, purchased regularly, form the thrift habit—and enable Americans to secure educational advantages for their children and achieve financial independence in old age.

The Treasury Department acknowledges with appreciation the publication of this message by

PRINTING EQUIPMENT ENGINEER

This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and War Advertising Council

INTERTYPE announces that manufacture of matrices for the last quarter of 1945 was considerably higher than in any previous quarter since the war began. While it has not yet been possible to fill all customers' orders, every effort is being made to raise the level of matrix shipments as rapidly as possible. We thank our customers for their forbearance in awaiting shipments. We know that they will applaud our resolve never to sacrifice standards of accuracy for the sake of speed. Intertype, Brooklyn 2, N. Y.

INTERTYPE